

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problems Mailbox.**

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Michèle Kidwell Examiner #: 77693 Date: 12/24/03
 Art Unit: 3761 Phone Number 30 52941 Serial Number: 101003, 204
 Mail Box and Bldg/Rm-Loc: CP2 - 3B16 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures; keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet; pertinent claims, and abstract.

Title of Invention: Liposuction Cannula

Inventors (please provide full names): Mike Fard; Christopher Hudson; Daniel
MCCombs

Earliest Priority Filing Date: 12/6/01

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

STAFF USE ONLY

Type of Search	Vendors and cost where applicable
NA Sequence (#):	STN _____
AA Sequence (#):	Dialog _____
Structure (#):	Questel/Orbit _____
Bibliographic:	Dr. Link _____
Litigation:	Lexis/Nexis _____
Fulltext:	Sequence Systems _____
Patent Family:	WWW/Internet _____
Other:	Other (Specify): _____

L Number	Hits	Search Text	DB	Time stamp
18	15208	elastic same fiber	USPAT; US-PGPUB	2003/12/13 09:18
19	1304	(elastic same fiber) and core and sheath	USPAT; US-PGPUB	2003/12/13 09:18
20	10	((elastic same fiber) and core and sheath) and gel adj content	USPAT; US-PGPUB	2003/12/13 09:20
21	55	(elastic same fiber) and gel adj content	USPAT; US-PGPUB	2003/12/13 09:22
22	1	"20030069557"	USPAT; US-PGPUB	2003/12/13 09:23
23	1292	cannula same plug	USPAT; US-PGPUB	2003/12/13 09:23
24	7	(cannula same plug) and liposuction	USPAT; US-PGPUB	2003/12/13 09:29
25	23250	cannula	USPAT; US-PGPUB	2003/12/13 09:29
26	7428	"225" and vent	USPAT; US-PGPUB	2003/12/13 09:29
27	7150	cannula and (vent or hole)	USPAT; US-PGPUB	2003/12/13 09:29
28	613	(cannula and (vent or hole)) and plug same (vent or hole)	USPAT; US-PGPUB	2003/12/13 09:30
29	70	((cannula and (vent or hole)) and plug same (vent or hole)) and aspiration	USPAT; US-PGPUB	2003/12/13 10:11
30	50804	(vent or hole) same plug	USPAT; US-PGPUB	2003/12/13 10:13
31	11	((vent or hole) same plug) and liposuction	USPAT; US-PGPUB	2003/12/13 10:11
32	366	((vent or hole) same plug) and aspiration	USPAT; US-PGPUB	2003/12/13 10:15
33	997179	tube or bore or lumen or cannula	USPAT; US-PGPUB	2003/12/13 10:15
34	50466	(tube or bore or lumen or cannula) and (vent or hole or opening) same plug	USPAT; US-PGPUB	2003/12/13 10:16
35	10692	(tube or bore or lumen or cannula) and (vent or hole or opening) same stopper	USPAT; US-PGPUB	2003/12/13 10:16
36	1822	((tube or bore or lumen or cannula) and (vent or hole or opening) same plug) and ((tube or bore or lumen or cannula) and (vent or hole or opening) same stopper)	USPAT; US-PGPUB	2003/12/13 10:16
37	0	(((tube or bore or lumen or cannula) and (vent or hole or opening) same plug) and ((tube or bore or lumen or cannula) and (vent or hole or opening) same stopper)) and liposuction	USPAT; US-PGPUB	2003/12/13 10:16
38	0	(((tube or bore or lumen or cannula) and (vent or hole or opening) same plug) and ((tube or bore or lumen or cannula) and (vent or hole or opening) same stopper)) and liposuction	USPAT; US-PGPUB	2003/12/13 10:16
39	309	(((tube or bore or lumen or cannula) and (vent or hole or opening) same plug) and ((tube or bore or lumen or cannula) and (vent or hole or opening) same stopper)) and suction	USPAT; US-PGPUB	2003/12/13 10:17
40	21	(((tube or bore or lumen or cannula) and (vent or hole or opening) same plug) or ((tube or bore or lumen or cannula) and (vent or hole or opening) same stopper)) and liposuction	USPAT; US-PGPUB	2003/12/13 10:53
41	184	liposuction	EPO; DERWENT	2003/12/13 11:11
42	6	5817050.URPN.	USPAT	2003/12/13 10:59
43	0	20020169469.URPN.	USPAT	2003/12/13 11:06
44	1596930	cannula or tube	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/12/13 11:11
45	2108772	vent or hole	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/12/13 11:11

46	660677	plug or stopper	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/12/13 11:11
47	59610	(cannula or tube) and (vent or hole) and (plug or stopper)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/12/13 11:12
48	1520	((cannula or tube) and (vent or hole) and (plug or stopper)) and aspiration	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/12/13 11:12
49	9	((5766194") or ("5312399") or ("5129896") or ("5178605") or ("5269750") or ("5163433") or ("4886491") or ("5527273") or ("4962330")).PN.	USPAT; US-PGPUB	2003/12/13 11:14
50	3348	(604/19,22,27,28,35,43,902,239,280).CCLS.	USPAT; US-PGPUB	2003/12/13 11:15
51	537	((604/19,22,27,28,35,43,902,239,280).CCLS.) and plug	USPAT; US-PGPUB	2003/12/13 11:15



STIC Search Report

EIC 3700

STIC Database Tracking Number: 110094

TO: Michele Kidwell
Location: cp2 3b16
Art Unit: 3761



Case Serial Number: 10/003204

From: Jeanne Horrigan
Location: EIC 3700
CP2-2C08
Phone: 305-5934

jeanne.horrigan@uspto.gov

Search Notes

Attached are the search results for the liposuction cannula, including searches in foreign and international patent databases and medical and general sci/tech non-patent literature databases.

I hope the attached information is useful. Please feel free to contact me (phone 305-5934 or email jeanne.horrigan@uspto.gov) if you have any questions or need additional searching on this application.

JH





STIC Search Results Feedback Form

EIC 3700

Questions about the scope or the results of the search? Contact **the EIC searcher or contact:**

John Sims, EIC 3700 Team Leader
308-4836, CP2-2C08

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 3730
- Relevant prior art **found**, search results used as follows:
- 102 rejection
 - 103 rejection
 - Cited as being of interest.
 - Helped examiner better understand the invention.
 - Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

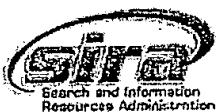
- Foreign Patent(s)
- Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- Results verified the lack of relevant prior art (helped determine patentability).
- Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC 3700 CP2-2C08



Serial 110941

December 30, 2003

File 387:The Denver Post 1994-2003/Dec 26
 File 471:New York Times Fulltext 90-Day 2003/Dec 28
 File 492:Arizona Repub/Phoenix Gaz 19862002/Jan 06
 File 494:St LouisPost-Dispatch 1988-2003/Dec 28
 File 498:Detroit Free Press 1987-2003/Dec 24
 File 631:Boston Globe 1980-2003/Dec 26
 File 633:Phil.Inquirer 1983-2003/Dec 25
 File 638:Newsday/New York Newsday 1987-2003/Dec 27
 File 640:San Francisco Chronicle 1988-2003/Dec 28
 File 641:Rocky Mountain News Jun 1989-2003/Dec 24
 File 702:Miami Herald 1983-2003/Dec 26
 File 703:USA Today 1989-2003/Dec 26
 File 704:(Portland)The Oregonian 1989-2003/Dec 27
 File 713:Atlanta J/Const. 1989-2003/Dec 28
 File 714:(Baltimore) The Sun 1990-2003/Dec 28
 File 715:Christian Sci.Mon. 1989-2003/Dec 29
 File 725:(Cleveland)Plain Dealer Aug 1991-2003/Dec 28
 File 735:St. Petersburg Times 1989- 2003/Dec 28
 File 635:Business Dateline(R) 1985-2003/Dec 27

Set	Items	Description
S1	226	FARD
S2	142221	HUDSON
S3	3198	MCCOMBS
S4	2272	LIPOSUCTION
S5	0	S1 AND S2 AND S3
S6	18	S1:S3 AND S4
S7	17	RD (unique items)
S8	137	CANNULA?
S9	0	S7 AND S8

File 348:EUROPEAN PATENTS 1978-2003/Dec W02
 File 349:PCT FULLTEXT 1979-2002/UB=20031225,UT=20031218

Set	Items	Description
S1	3	AU='FARD MIKE'
S2	2	AU='HUDSON CHRISTOPHER J'
S3	2	AU='MCCOMBS DANIEL L'
S4	2	S1 AND S2 AND S3 [duplicates]
S5	1	S1:S3

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200382
 File 347:JAPIO Oct 1976-2003/Aug(Updated 031202)
 File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	5	AU='FARD M':AU='FARD M M'
S2	14	AU='HUDSON C' OR AU='HUDSON C J'
S3	7	AU='MCCOMBS D' OR AU='MCCOMBS D L'
S4	1	S1 AND S2 AND S3
S5	6898	CANNULA?
S6	23	S1:S3 NOT S4
S7	2	S5 AND S6

4/7/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015431584 **Image available**

WPI Acc No: 2003-493726/200346

Liposuction cannula for sculpturing selected parts of the body such as hips, has vent hole for increasing mass flow rate of fatty tissue and other debris through the cannula system

Patent Assignee: FARD M (FARD-I); HUDSON C J (HUDS-I); MCCOMBS D L (MCCO-I); MICROAIRE SURGICAL INSTR INC (MICR-N)

Inventor: FARD M ; HUDSON C J ; MCCOMBS D L

Number of Countries: 100 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200349653	A2	20030619	WO 2002US38973	A	20021206	200346 B
US 20030125681	A1	20030703	US 20013204	A	20011206	200351

Priority Applications (No Type Date): US 20013204 A 20011206

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200349653	A2	E	26	A61F-005/44

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW
US 20030125681 A1 A61F-005/44

Abstract (Basic): WO 200349653 A2

NOVELTY - The cannula (10) includes a tube (12) with a bore extending along its length and a vent hole (20). An assembly is connected (18) to a proximal end of the tube and an aspirator tip (14) has openings (16) positioned at another end of the tube remote from the assembly. A plug with an air passage is inserted within the vent hole such that the air passage is in fluid communication with the bore of the cannula, allowing air to flow within the bore of the tube to increase mass flow rate of fatty tissue and other debris.

USE - Liposuction for surgically contouring selected parts of the body such as abdomen, buttocks, hips and thighs.

ADVANTAGE - Increases mass flow rate of fatty tissue and other debris through the cannula system.

DESCRIPTION OF DRAWING(S) - The drawing shows a plan view of the cannula system.

cannula system (10)
tube (12)
aspirator tip (14)
openings (16)
connector assembly (18)
vent hole (20)
pp; 26 DwgNo 1/14

Derwent Class: P32

International Patent Class (Main): A61F-005/44

7/7/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013500348 **Image available**

WPI Acc No: 2000-672289/200065

Powered assisted liposuction and lipoinjection equipment has cannula with a reciprocating member connected to compressible air source with hose engaging member

Serial 110941

December 30, 2003

Patent Assignee: MICROAIRE SURGICAL INSTR INC (MICR-N)

Inventor: FARD M ; MOZSARY P G; PASCALOFF J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6139518	A	20001031	US 9737389	A	19970207	200065 B
			US 97814871	A	19970311	
			US 97917774	A	19970827	
			US 99273768	A	19990322	

Priority Applications (No Type Date): US 9737389 P 19970207; US 97814871 A 19970311; US 97917774 A 19970827; US 99273768 A 19990322

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6139518	A	13	A61B-017/20	Provisional application US 9737389 CIP of application US 97814871 Div ex application US 97917774 Div ex patent US 5911700

Abstract (Basic): US 6139518 A

NOVELTY - The power assisted liposuction and lipoinjection equipment comprises **cannula** (10), handle (12) and reciprocating member (14) connected to compressible air source by connector (18). The speed of reciprocation is variable under control lever (20). A hose engaging member (38) is part of the connector (24) being part of the **cannula**. The rear of the **cannula** extends through cylindrical bore (42) with vacuum hose held on the handle by hose clamping slot (32).

USE - For use as a powered assisted liposuction and lipoinjection equipment.

ADVANTAGE - The connector is radially offset from the **cannula** from the reciprocating member to position, which is axially in alignment with the vacuum hose, avoiding bend regions and enhancing the suction.

DESCRIPTION OF DRAWING(S) - Figure of a side view of the power assisted liposuction and sectional view of the **cannula** connector.

Cannula (10)

Handle (12)

Reciprocating member (14)

Connector (18,24)

Control lever (20)

Hose engaging member (38)

Hose clamping slot (32)

Cylindrical bore (42)

pp; 13 DwgNo 1a,5/11

Derwent Class: P31

International Patent Class (Main): A61B-017/20

7/7/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

012089525 **Image available**

WPI Acc No: 1998-506436/199843

Power assisted liposuction handpiece - has hand-held housing, reciprocating member, cannula, and connector mounted on cannula releasably connected to portion of reciprocating member exterior housing

Patent Assignee: MICROAIRE SURGICAL INSTR INC (MICR-N); MICROAIRE SURGICAL INSTR (MICR-N)

Inventor: MOZSARY P G; FARD M ; MOZSARY PETER G; PASCOLOFF J; PASCALOFF J

December 30, 2003

Number of Countries: 080 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9840021	A1	19980917	WO 98US4535	A	19980309	199843 B
AU 9866928	A	19980929	AU 9866928	A	19980309	199906
US 5911700	A	19990615	US 97814871	A	19970311	199930
			US 97917774	A	19970827	
EP 1006895	A1	20000614	EP 98909046	A	19980309	200033
			WO 98US4535	A	19980309	
BR 9808317	A	20000516	BR 988317	A	19980309	200035
			WO 98US4535	A	19980309	
MX 9908365	A1	20000801	MX 998365	A	19990910	200137
US 6258054	B1	20010710	US 97814871	A	19970311	200141
			US 97917774	A	19970827	
			US 99273768	A	19990322	
			US 2000634847	A	20000808	
JP 2001514559	W	20010911	JP 98539655	A	19980309	200167
			WO 98US4535	A	19980309	
ES 2171369	T1	20020916	EP 98909046	A	19980309	200270

Priority Applications (No Type Date): US 97917774 A 19970827; US 97814871 A 19970311; US 99273768 A 19990322; US 2000634847 A 20000808

Patent Details:

Patent No Kind Lan Pg. Main IPC Filing Notes
WO 9840021 A1 E 39 A61B-017/20

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9866928 A Based on patent WO 9840021

US 5911700 A CIP of application US 97814871

EP 1006895 A1 E A61B-017/20 Based on patent WO 9840021

Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

BR 9808317 A A61B-017/20 Based on patent WO 9840021

MX 9908365 A1 A61B-017/20

US 6258054 B1 A61B-017/20 CIP of application US 97814871

Div ex application US 97917774

Cont of application US 99273768

Div ex patent US 5911700

Cont of patent US 6139518

JP 2001514559 W 33 A61B-017/22 Based on patent WO 9840021

ES 2171369 T1 A61B-017/20 Based on patent EP 1006895

Abstract (Basic): WO 9840021 A

The handpiece includes a handle (12) which provides power to reciprocate a **cannula** (10) back and forth during surgery. The **cannula** (10) can be connected to the handle (12) by a connector (24) that is affixed to, integrally formed with, or selectively joinable to a reciprocating member (14).

The handle may be configured such that the reciprocating member is selectively detachable, thereby, allowing the handle to be used for additional surgical procedures such as sawing or drilling. A vacuum hose (26) is connected to the **cannula** such that vacuum pressure can be exerted through the **cannula** for aspirating severed fat tissue. The connector may radially offset the **cannula** from the reciprocating

member to a position which is axially in alignment with the vacuum hose, thereby avoiding bend regions and enhancing suction.

USE - For surgically removing fat tissue from selected portions of patient's body.

ADVANTAGE - Is simple in construction, and provides improved control in direction and accuracy of fat removal, i.e. eliminates bumpiness at edges of operated areas, making it possible to easily remove small patches at the neck etc.

1A,1B/11

Derwent Class: P31; P34

International Patent Class (Main): A61B-017/20; A61B-017/22

International Patent Class (Additional): A61B-017/00; A61B-017/32;
A61M-037/00

File 155: MEDLINE(R) 1966-2003/Dec W4

File 5: Biosis Previews(R) 1969-2003/Dec W3

File 73: EMBASE 1974-2003/Dec W3

File 34: SciSearch(R) Cited Ref Sci 1990-2003/Dec W3

File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec

Set Items Description

S1	6	AU='FARD M' OR AU='FARD M.'
S2	2	AU='FARD MIKE'
S3	37	AU='HUDSON C J'
S4	16	AU='HUDSON C.J.'
S5	23	AU='HUDSON CJ'
S6	2	AU='HUDSON CHRIS J'
S7	17	AU='HUDSON CHRISTOPHER' OR AU='HUDSON CHRIS'
S8	313	AU='HUDSON C'
S9	61	AU='HUDSON C.'
S10	4	AU='MCCOMBS D' OR AU='MCCOMBS D L'
S11	2	AU='MCCOMBS D.'
S12	0	S1:S2 AND S3:S9 AND S10:S11*
S13	77624	CANNULA?
S14	1	S1:S11 AND S13

14/7/1 (Item 1 from file: 5)

DIALOG(R) File 5: Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

0013078802 BIOSIS NO.: 200100250641

Powered assisted liposuction and lipoinjection equipment

AUTHOR: Mozsary Peter G (Reprint); Fard Mike ; Pascaloff John

AUTHOR ADDRESS: Valley, CA, USA**USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1239 (5): Oct. 31, 2000 2000

MEDIUM: e-file

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A power assisted liposuction/lipoinjection handpiece includes a handle (12) which provides power to reciprocate a cannula (10) back and forth during surgery. The cannula (10) can be connected to the handle (12) by a connector (24) that is affixed to, integrally formed with, or selectively joinable to a reciprocating member (14). Benefits in sterilization, distribution and surgical use can be realized when the cannula (10) and connector (24) are joined together, such that the surgeon merely

needs to remove the **cannula** (10) from the package and connect it to a reciprocating member of a powered handle (12). The handle (12) may be configured such that the reciprocating member (14) is selectively detachable; thereby, allowing the handle (12) to be used for additional surgical procedures such as sawing or drilling. A vacuum hose (26) is connected to the **cannula** (10) such that vacuum pressure can be exerted through the **cannula** (10) for aspirating severed fat tissue. Preferably, the connector (24) radially offsets the **cannula** (10) from the reciprocating member (14) to a position which is axially in alignment with the vacuum hose (26); thereby avoiding bend regions and enhancing suction.

Serial 110941

December 30, 2003

File 155: MEDLINE(R) 1966-2004/Jan W1
 File 5: Biosis Previews(R) 1969-2003/Dec W3
 File 73: EMBASE 1974-2003/Dec W3

Set	Items	Description
S1	35908	CANNULA? ?
S2	747509	CATHETER? ? OR TUBE OR TUBES OR TUBING OR TUBUL? OR PIPE OR PIPES OR PIPET? OR CONDUIT?
S3	2207	BOREHOLE? OR VENTHOLE? OR (BORE OR VENT) () (HOLE OR HOLES)
S4	122805	APERTURE? OR OPENING? OR BORE OR BORES
S5	22532	PLUG? OR STOPPER?
S6	30314	AIRFLOW? OR AIRSTREAM? OR AIR() (FLOW? OR STREAM? OR PASSAGE?)
S7	4203	LIPOSUCTION? OR LIPECTOMY OR LIPOLYS? S(S) SUCTION? OR BODY() (CONTOUR? OR SCULPT?) (2N) SURGER???
S8	2438	'LIPECTOMY' OR DC='E4.680.450.' OR R3:R6 OR R12 OR R13 OR R14
S9	0	S1 AND S3 AND S5 AND S6
S10	132	S1:S2 AND S3:S4 AND S5
S11	5	S10 AND S6
S12	0	S11 AND S7:S8
S13	0	S10 AND S7:S8
S14	0	S11/2002:2003
S15	5	S11
S16	3	RD (unique items)
S17	175	S1 AND S8
S18	6	S3:S4 AND S17
S19	6	S18 NOT S15
S20	5	RD (unique items)
S21	402	S1:S2 AND S7:S8
S22	21	S3:S4 AND S21
S23	0	S5 AND S22
S24	0	S5 AND S21
S25	0	S6 AND S22
S26	15	S22 NOT (S18 OR S15)
S27	13	RD (unique items)
S28	6	S27/2002:2003
S29	7	S27 NOT S28
S30	7	Sort S29/ALL/PY,A

16/6/1 (Item 1 from file: 155)

03533100 81225123 PMID: 7244428

Partial airway occlusion during sleep and waking in the dog.

Jan 1981

16/6/2 (Item 1 from file: 5)

0013082737 BIOSIS NO.: 200100254576

Effect of end-inspiratory lung volume on breath-hold duration in garter snakes

2001

16/7,K/3 (Item 2 from file: 5)

DIALOG(R) File 5:Biosis;:Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

0012843547 BIOSIS NO.: 200100015386

Corporeal access tube assembly and method

AUTHOR: Quinn David G

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1234 (4): May 23, 2000 2000

MEDIUM: e-file

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A corporeal access assembly including a **tube** segment having a body formed of silicone rubber and containing a coil spring embedded therein. The silicone rubber has a low durometer hardness of about 35 on the A scale. The **tube** segments have relatively large diameter liquid flow passages therethrough for all French sizes, from 12Fr to 24Fr. The body wall thickness for all French sizes remains the same. An air lumen is provided in one embodiment of the **tube** segment, with a set connector attached which has a removable **plug** for blocking or **opening** an **air passage** to a retention balloon.

DESCRIPTORS:

METHODS & EQUIPMENT: corporeal access **tube** assembly...

...bladder access **tube** assembly, gastrostomy access **tube** assembly,
improved flow rates, medical equipment

20/7,K/2 (Item 2 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

10466718 96273868 PMID: 8667580

[Early results of our 1-year experience in using lipo-aspiration]

Ranni rezultati ot ednogodishniia ni opit pri prilozhenieto na lipoaspiratsiia.

Boltadzhiev N; Vachkova K; Petrov V

Khirurgija (BULGARIA) 1995, 48 (3) p34-5, ISSN 0450-2167

Journal Code: 0376355

Document type: Journal Article ; English Abstract

Languages: BULGARIAN

Main Citation Owner: NLM

Record type: Completed

Lipoaspiration is a method of subcutaneous fatty tissue reduction by vacuum aspiration through a **cannula** or syringes, using one or more incisional **openings**. Lipoaspiration is indeed a revolution in the surgical modelling of a silhouette, and nowadays it is widely diffused and practically implemented worldwide. At the cost of a small scar any subcutaneous fatty accumulation lends itself successfully to correction. Virtually, this means that the whole body--from chin to ankle--may undergo remodelling. Lipospiration is successful in correcting the deep so-called "cold adipose tissue" (graisses froides) which is irresponsive to diet reduction.

Record Date Created: 19960806

Record Date Completed: 19960806

Descriptors: **Lipectomy** --utilization--UT; Adolescent; Adult; Aged; Bulgaria; **Lipectomy** --instrumentation--IS; **Lipectomy** --statistics and numerical data--SN; Middle Age

20/7,K/4 (Item 4 from file: 155)

DIALOG(R)File 155: MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

06710158 90336175 PMID: 2199109

Liposuction of lipomas.

Pinski K S; Roenigk H H

Department of Dermatology, Northwestern University, Chicago, Illinois.

Serial 110941

December 30, 2003

Dermatologic clinics (UNITED STATES) Jul 1990, 8 (3) p483-92, ISSN 0733-8635 Journal Code: 8300886

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

When lipomas reach 4 cm or more in size or are multiple, **liposuction** becomes an excellent alternative to excisional surgery. The basic concept is that fat lobules are bluntly broken down or curetted by a **cannula** and then removed through the **cannula's aperture** by a vacuum force generated from a suction machine. There are few minor sequelae, and these are rarely of a prolonged nature. The benefits of **liposuction** are decreased surgical time, a shorter scar, a better final contour, and the ability to remove several lipomas through one **opening**. In addition, **liposuction** surgery is a useful modality for the removal of lipomas because of the low recurrence rate and minimal malignant potential of these tumors. (59 Refs.)

Record Date Created: 19900913

Record Date Completed: 19900913

Descriptors: **Lipectomy**; *Lipoma--surgery--SU; **Lipectomy**--methods--MT; Lipomatosis--surgery--SU; Liposarcoma--surgery--SU; Sex Factors; Skin Neoplasms--surgery--SU

20/7,K/5 (Item 5 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

04633686 84277156 PMID: 6464840

Body sculpturing by lipo-suction extraction.

Dolsky R L

Aesthetic plastic surgery (UNITED STATES) 1984, 8 (2) p75-83, ISSN 0364-216X Journal Code: 7701756

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Classical open surgical contouring and sculpturing of the body has required significant scarring with long incisions and wide depressed scars. During the last decade, a small number of European surgeons have pioneered techniques for suction **lipectomy**. Illouz introduced the concept of lipolysis and blunt **cannula** extraction. The method described herein, which is termed lipo-suction, is a dry technique. No lipolytic solutions or local anesthetic solutions are injected. The technique relies on mechanical disruption and suction extraction of adipose tissue. The instrument is a rigid blunt-ended extractor with dull **apertures**. Postoperative care is a significant factor in reducing the rate of seroma formation to less than 1%.

Record Date Created: 19840918

Record Date Completed: 19840918

30/7/1 (Item 1 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2003 The Dialog Corp. All rts. reserv.

04834263 85140618 PMID: 3975299

The helical opening in suction cannulas for lipolysis .

Drever J M

Plastic and reconstructive surgery (UNITED STATES) Mar 1985, 75 (3) p442-3, ISSN 0032-1052 Journal Code: 1306050

Document type: Letter

Serial 110941

December 30, 2003

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
Record Date Created: 19850328
Record Date Completed: 19850328

30/7/4 (Item 4 from file: 155)

DIALOG(R)File 155: MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.
10451743 96258470 PMED: 8682687
Submandibular tissue obstruction of tracheostomy tube: reversal with "chin sling".

Mallepalli J; Gonzalez I; Ng A; Andresen A F; Brandstetter R D
Department of Medicine, New Rochelle Hospital Medical Center, NY 10802,
USA.

Heart & lung - the journal of critical care (UNITED STATES) Mar-Apr
1996, 25 (2) p158-60, ISSN 0147-9563 Journal Code: 0330057

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

We report on a 55-year-old woman with a tracheostomy who had unexplained respiratory failure from acute nocturnal shortness of breath. During the second day of admission, the patient noticed that her "second chin" folded over the tracheostomy on neck flexion, occluding her artificial way. The patient jury-rigged a strap to retain the submental tissue from occluding the opening of the tracheostomy **tube**. She was subsequently free from obstructive symptoms with good oxygen saturation even with neck flexion. She was consequently discharged with a presumptive diagnosis of acute upper airway obstruction. We believe that this unusual complication of the tracheostomy **tube** may be more common than appreciated. Accordingly, patients with a tracheostomy should be evaluated through a full range of body and neck positions. Increases in body fat and tissue relaxation should be suspected as possible causes occlusion of tracheostomy **tubes**. The application of a "chin sling" can reverse this unusual upper airway obstruction until definitive correction by surgical **lipectomy** is performed.

Record Date Created: 19960822

Record Date Completed: 19960822

30/7/5 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
0013020328 BIOSIS NO.: 200100192167
Device for suction-assisted lipectomy and method of using same
AUTHOR: Bass Lawrence S (Reprint)
AUTHOR ADDRESS: 4 Garden St., Great Neck, NY, 11021, USA**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1237 (3): Aug. 15, 2000 2000
MEDIUM: e-file
ISSN: 0098-1133
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
ABSTRACT: A device is described which allows simultaneous application of suction or vacuum for evacuation of fat with application of energy to the

fat inside an **opening** in a **cannula**. A pair of electrodes is situated within the cavity of the **cannula** just under the surface of **cannula** tip **opening** (s) or as part of the walls of such **openings**. The electrodes are spaced to allow coagulation of fat entering the **cannula**. Irrigation may be applied in a continuous or discontinuous or intermittent stream within the **cannula** to cool the tip and facilitate removal of suctioned tissue and prevent buildup of debris on electrodes. A method for using the **cannula** to remove adipose tissue or fat destroyed by the energy application through the use of suction with mechanical motion of the **cannula**, with energy application and optionally with the use of irrigation is also disclosed.

30/7/6 (Item 6 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

0012996691 BIOSIS NO.: 200100168530

Highly flexible, reinforced swan neck liposuction cannulas

AUTHOR: Weber Paul J (Reprint); DaSilva Luiz B; Weber Michael R

AUTHOR ADDRESS: 1 Seneca Rd., Ft. Lauderdale, FL, 33308, USA**USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1236 (3): July 18, 2000 2000

MEDIUM: e-file

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: The flexible, **cannulas** are constructed of metal and plastic, with the metal **cannulas** having diameters of between 2.0 and 3.5 mm, and with the plastic **cannulas** having diameters greater than 3.5 mm (i.e., 3.5 to 6.0 mm). These long shaft flexible **cannulas**, when utilized in combination with a reinforced neck, allow the **cannula** point of entry to act as a fulcrum (with an optional interposed insert) in concert with the surgeon's guiding hand to deflect the **cannulas**. The **cannula** tip is preferably highly beveled with an adjacent set of three **openings**, and the **cannula** easily penetrates fibrous fat and may reach fat deposits relatively distant from the entrance wounds. The long shaft, highly flexible, reinforced swan neck **cannulas** move in an easily controllable manner within the subcutaneous tissue below the dermal envelope in an arciform fashion. Benefits include a reduced need to move a patient's body position intraoperatively. The swan neck has been reinforced to provide the needed additional stability at handle/shaft junction to help the surgeon increase leverage on the **cannula** shaft. The long, flexible plastic **cannula** shafts are provided central metal "memory" reinforcing wires of varying thicknesses along the length thereof which allow controlled rigidity of the long plastic shafts, and enable the **cannulas** to be bent into a semi-circle without breaking and yet return to their original shape.

30/7/7 (Item 7 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2003 BIOSIS. All rts. reserv.

0013274862 BIOSIS NO.: 200100446701

Power assisted liposuction device

AUTHOR: Poole James (Reprint)

AUTHOR ADDRESS: P.O. Box 488, Santa Paula, CA, 93060-0488, USA**USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office

Patents 1245 (2): Apr. 10, 2001 2001

MEDIUM: e-file

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A method and apparatus is described for performing a **liposuction** procedure by means of a power-assisted **liposuction** device. The apparatus comprises a hand-holdable handle assembly (enclosing a gas driven reciprocating piston rod), a detachable **cannula**, an aspirator pump attached to the hand-holdable handle assembly and a foot pedal assembly that includes a vibrator element for regulating the supply of gas to the hand-holdable handle assembly. The hand-holdable handle assembly generally consists of a barrel, a hollow piston rod which reciprocates relative to the barrel, a seal body, an end cap (having a internal aspirated chamber), an atmospheric access return gallery, and a return spring chamber. Detachably coupled to the hand-holdable handle assembly by means of a quick disconnect is a hollow **cannula**, the distal end of which contains an aspiration **aperture**. The foot pedal assembly generally consists of a pedal bell, a metering chamber and a vibrator element, all of which together allow the operator to regulate the flow of gas to the hand-holdable handle assembly, (and, correspondingly, the reciprocation of the hollow piston rod and the hollow **cannula**) Finally, the hand-holdable handle assembly and the hollow **cannula** are constructed such that, they together with the necessary **tubing**, may be easily sterilized.

File 34:SciSearch(R) Cited Ref Sci 1990-2003/Dec W4
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 144:Pascal 1973-2003/Dec W2
File 2:INSPEC 1969-2003/Dec W2
File 6:NTIS 1964-2003/Dec W4
File 8:Ei Compendex(R) 1970-2003/Dec W3
File 99:Wilson Appl. Sci. & Tech Abs 1983-2003/Nov
File 65:Inside Conferences 1993-2003/Dec W4
File 94:JICST-EPlus 1985-2003/Dec W3
File 35:Dissertation Abs Online 1861-2003/Nov
File 95:TEME-Technology & Management 1989-2003/Dec W2
Set Items Description
S1 13612 CANNULA? ?
S2 1230718 CATHETER? ? OR TUBE OR TUBES OR TUBING OR TUBUL? OR PIPE OR
PIPES OR PIPET? OR CONDUIT?
S3 54140 BOREHOLE? OR VENTHOLE? OR (BORE OR VENT) () (HOLE OR HOLES)
S4 434557 APERTURE? OR OPENING? OR BORE OR BORES
S5 75871 PLUG? OR STOPPER?
S6 80421 AIRFLOW? OR AIRSTREAM? OR AIR() (FLOW? OR STREAM? OR PASSAGE?)
S7 2418 LIPOSUCTION? OR LIPECTOMY OR LIPOLYS? S(S) SUCTION? OR BODY()
(CONTOUR? OR SCULPT?) (2N) SURGER???

S8 356 S1:S2 AND S3:S4 AND S5
S9 6 S6 AND S8
S10 0 S7 AND S9
S11 0 S9/2002:2003
S12 6 S9
S13 5 RD (unique items)
S14 207 S1:S2 AND S7
S15 0 S5 AND S6 AND S14
S16 0 S5 AND S14
S17 0 S6 AND S14
S18 3 S3:S4 AND S14
S19 3 S18 NOT S12

13/6/2 (Item 1 from file: 6)

1405056 NTIS Accession Number: NTN88-0960

Hydrogen/Air-Ignition Torch: The torch is simple, reliable, and economical (NTIS Tech Note)

Nov 88

13/7/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2003 Institution of Electrical Engineers. All rts. reserv.

03436768 INSPEC Abstract Number: A89098750

Title: Blowing a U- tube seal

Author(s): Gardner, G.E.; Oates, H.S.

Author Affiliation: Central Electr. Res. Labs., Leatherhead, UK

Journal: Nuclear Engineering and Design vol.113, no.1 p.131-40

Publication Date: April 1989 Country of Publication: Netherlands

CODEN: NEDEAU ISSN: 0029-5493

U.S. Copyright Clearance Center Code: 0029-5493/89/\$03.50

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P); Experimental (X)

Abstract: Experiments were carried out with an 84 mm bore U- tube seal charged with water but in the fault condition with air being blown through. With steady state blowing, the overall pressure drop, the amount of water

Serial 110941

December 30, 2003

in the system and the splash height from the average water level in the discharge limb to the overflow were measured. Also the amount of water expressed by a Dumitrescu-Taylor bubble when an air flow was suddenly imposed was measured. The major part of all the measured parameters can be estimated using Gardner's (1980) correlation for voidage, Nicklin, Wilkes and Davidson's (1962), equation for the velocity of a Dumitrescu-Taylor bubble and a tentative new splash height correlation. The correction factors due to end effects necessary to get complete agreement between the experimental measurements and the estimates are presented. The results have application to loop seal blowout in a PWR loss of coolant accident. (3 Refs)

Subfile: A

13/7/3 (Item 2 from file: 6)

DIALOG(R)File 6:NTIS

(c) 2003 NTIS, Intl Cpyrgt All Rights Res. All rts. reserv.

0844854 NTIS Accession Number: PB80-214299/XAB

Induced Air Flow Self-Cleaning Spray Nozzle

(Patent Application)

Fraley, J. E. ; Sommers, E. F. ; Strang, S. ; McConnell, W. C.

Department of the Interior, Washington, DC.

Corp. Source Codes: 004199000

Report No.: PAT-APPL-954 026; PATENT-4 200 232

Filed 23 Oct 78 patented 29 Apr 80 6p

Languages: English Document Type: Patent

Journal Announcement: GRAT8024

Supersedes PB-292 218

This Government-owned invention available for U.S. licensing and, possibly, for foreign licensing. Copy of application available NTIS.

NTIS Prices: Not available NTIS

Country of Publication: United States

The spray nozzle forming the subject matter herein relates to a main central material coating conduit with a fluid spray assembly mounted on it near its discharge end opening. The spraying assembly has a series of discharge holes facing in the same direction as the main conduit opening and encircling it. The front discharge section of the main conduit is gradually tapered so that it narrows down towards the opened end. Between the tapered front end of the main conduit and the closest inner side surface of the spray assembly there is formed a space which encircles the main conduit. An airflow is induced through this space as air discharges occur at the main conduit. This induced airflow acts to clean the nozzle and prevent plugging by externally mixed material. The primary object of the invention is an improved self-cleaning non-plugging spray nozzle.

13/7/4 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c) 2003 Japan Science and Tech Corp(JST). All rts. reserv.

02246765 JICST ACCESSION NUMBER: 95A0029570 FILE SEGMENT: JICST-E

Study on the Perforated- Plug Muffler.

SUZUKI SHOJI (1); SHIBATA SATORU (1); KATO AKIRA (1)

(1) Hosei Univ.

Nippon Kikai Gakkai Ryutai Kogaku Bumon Koenkai Koen Ronbunshu, 1994,
VOL.1994, PAGE.29-30, FIG.5, REF.1

JOURNAL NUMBER: L0394AAV

UNIVERSAL DECIMAL CLASSIFICATION: 534.2+534.8

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

Serial 110941

December 30, 2003

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

ABSTRACT: There is no information for the design of mufflers of perforated-plug type. Therefore, the purpose of this study is to establish the theory for perforated-plug muffler. We examine an effect of hole pitch of perforated pipe, hole diameter and the opening ratio of hole area (m) for noise reduction, and the theoretical value with the measured value was compared. Further, this report describes the influence of air flow on the attenuation characteristics of a perforated-plug muffler. (author abst.)

13/7/5 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

01046951 JICST ACCESSION NUMBER: 90A0356136 FILE SEGMENT: JICST-E

Special issue : control valve under special conditions. Fluid behavior in control valve interior.

OKUTSU RYOJI (1); INOUE FUMIHIRO (2); OTA EISUKE (2)

(1) Yamatake-Honeywell Co., Ltd.; (2) Waseda Univ., School of Science and Engineering

Keisoku Gijutsu(Instrumentation and Automation), 1990, VOL.18,NO.5,
PAGE.35-40, FIG.7, REF.17

JOURNAL NUMBER: S0852AAH ISSN NO: 0385-9886

UNIVERSAL DECIMAL CLASSIFICATION: 621.64

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

ABSTRACT: In a control valve, opening changes at any time, and flow passage changes. However, flow characteristics under reduced pressure must smoothly change in the entire range between full opening and closing of a valve. It is also necessary to control the degree of energy conversion to vibration, and noise to a minimum. This paper reviews problems related to the internal flow of a valve. The following are explained.1) Internal flow patterns of gas flow control valves (conical plug and cage type valves).2) Internal flow state of water flow control valves (cavitation generation).

19/7/2 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2003 Inst for Sci Info. All rts. reserv.

04721547 Genuine Article#: UD382 Number of References: 4

Title: SUBMANDIBULAR TISSUE OBSTRUCTION OF TRACHEOSTOMY TUBE - REVERSAL WITH CHIN SLING

Author(s): MALLEPALLI J; NG A; ANDRESEN AFR; BRANDSTETTER RD

Corporate Source: NEW ROCHELLE HOSP,MED CTR,DEPT MED,16 GUION PL/NEW

ROCHELLE//NY/10802; NEW ROCHELLE HOSP,MED CTR,DEPT MED/NEW

ROCHELLE//NY/10802

Journal: HEART & LUNG, 1996, V25, N2 (MAR-APR), P158-160

ISSN: 0147-9563

Language: ENGLISH Document Type: ARTICLE

Abstract: We report on a 55-year-old woman with a tracheostomy who had unexplained respiratory failure from acute nocturnal shortness of breath. During the second day of admission, the patient noticed that her "second chin" folded over the tracheostomy on neck flexion,

occluding her artificial airway. The patient jury-rigged a strap to retain the submental tissue from occluding the **opening** of the tracheostomy **tube**. She was subsequently free from obstructive symptoms with good oxygen saturation even with neck flexion. She was consequently discharged with a presumptive diagnosis of acute upper airway obstruction. We believe that this unusual complication of the tracheostomy **tube** may be more common than appreciated. Accordingly, patients with a tracheostomy should be evaluated through a full range of body and neck positions. Increases in body fat and tissue relaxation should be suspected as possible causes of occult occlusion of tracheostomy **tubes**. The application of a "chin sling" can reverse this unusual upper airway obstruction until definitive correction by surgical **lipectomy** is performed.

Serial 110941

December 30, 2003

File 98:General Sci Abs/Full-Text 1984-2003/Nov
File 9:Business & Industry(R) Jul/1994-2003/Dec 29
File 16:Gale Group PROMT(R) 1990-2003/Dec 30
File 160:Gale Group PROMT(R) 1972-1989
File 148:Gale Group Trade & Industry DB 1976-2003/Dec 25
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Dec 25
File 149:TGG Health&Wellness DB(SM) 1976-2003/Dec W1
File 636:Gale Group Newsletter DB(TM) 1987-2003/Dec 30
File 441:ESPICOM Pharm&Med DEVICE NEWS 2003/Dec W3
File 20:Dialog Global Reporter 1997-2003/Dec 30

Set	Items	Description
S1	4684	CANNULA? ?
S2	905130	CATHETER? ? OR TUBE OR TUBES OR TUBING OR TUBUL? OR PIPE OR PIPES OR PIPET? OR CONDUIT?
S3	9998	BOREHOLE? OR VENTHOLE? OR (BORE OR VENT) () (HOLE OR HOLES)
S4	2000455	APERTURE? OR OPENING? OR BORE OR BORES
S5	492081	PLUG? OR STOPPER?
S6	43058	AIRFLOW? OR AIRSTREAM? OR AIR() (FLOW? OR STREAM? OR PASSAGE?)
S7	4372	LIPOSUCTION? OR LIPECTOMY OR LIPOLYS?S(S) SUCTION? OR BODY() (CONTOUR? OR SCULPT?) (2N) SURGER???
S8	434	S1:S2 AND S7
S9	4786	S3:S4(S)S5
S10	1181	S3:S4(S)S6
S11	449	S1:S2(S)S9:S10
S12	22	S9(S)S10
S13	5	S11(S)S12
S14	0	S8 AND S13
S15	1	S13/2002:2003
S16	4	S13 NOT S15
S17	2	RD (unique items)

17/3,AB,K/1 (Item 1 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2003 The Gale Group. All rts. reserv.
07986208 Supplier Number: 62139921

Treatment of otitis media with effusion based on politzerization with an automated device.

Arick, Daniel S.; Silman, Shlomo
Ear, Nose and Throat Journal, v79, n4, p290
April, 2000

Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Refereed; Professional
Word Count: 2770

... is used for the nonsurgical management of otitis media with effusion and to treat eustachian tube dysfunction. The apparatus includes a compressor that provides a continuous flow of air at a predetermined pressure. A tapered nostril plug has a distal opening through which the continuous flow of air passes. The device can be set to deliver airflow in the range of approximately 1 to 4 L/min, which will provide an air...

Serial 110941
 December 30, 2003

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200382
 File 347:JAPIO Oct 1976-2003/Aug (Updated 031202)
 File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	6589	CANNULA?
S2	1743481	CATHETER? ? OR TUBE OR TUBES OR TUBING OR TUBUL? OR PIPE OR PIPES OR PIPET? OR CONDUIT?
S3	34170	BOREHOLE? OR VENTHOLE? OR (BORE OR VENT) () (HOLE OR HOLES)
S4	1460993	APERTURE? OR OPENING? OR BORE OR BORES
S5	294283	PLUG? OR STOPPER?
S6	145926	AIRFLOW? OR AIRSTREAM? OR AIR() (FLOW? OR STREAM? OR PASSAGE?)
S7	189	LIPOSUCTION? OR LIPECTOMY OR LIPOLYS? S(S) SUCTION? OR BODY(-) (CONTOUR? OR SCULPT?) (2N) SURGER???
S8	156737	IC=A61F OR IC=A61B-017
S9	264	S1:S2 AND S3:S4 AND S5 AND S6
S10	1	S7 AND S9
S11	3	S8 AND S9
S12	1	S10 AND S11 [a duplicate]
S13	2	S11 NOT S12
S14	121	S1:S2(S)S3:S4(S)S5(S)S6
S15	496613	IC=A61?
S16	0	IC=A61
S17	4	S14 AND S15
S18	3	S17 NOT S10:S13
S19	1	S1:S2 AND S3:S4 AND S5 AND S7
S20	0	S19 NOT (S10:S13 OR S17)
S21	246	S1:S2 AND S3:S4 AND S5 AND S8
S22	9599	S1:S2(S)S3:S4(S)S5
S23	142	S22 AND S8
S24	1271483	AIR
S25	11	S24(S)S22 AND S8
S26	10	S25 NOT (S10:S13 OR S17)

13/7,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX
 (c) 2003 Thomson Derwent. All rts. reserv.
 009942374 **Image available**
 WPI Acc No: 1994-210087/199426

Perfusion cannula for artery insertion - includes hollow flexible trocar contg. guide wire and with pointed apertured head

Patent Assignee: GABBAY S (GABB-I); SHELHIGH INC (SHEL-N)

Inventor: GABBAY S

Number of Countries: 019 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 604803	A2	19940706	EP 93119918	A	19931210	199426 B
US 5330451	A	19940719	US 92992116	A	19921217	199428
CA 2110842	A	19940618	CA 2110842	A	19931207	199432
EP 604803	A3	19940928	EP 93119918	A	19931210	199533
US 5599329	A	19970204	US 92992116	A	19921217	199711
			US 94200211	A	19940223	
EP 604803	B1	20020227	EP 93119918	A	19931210	200215
DE 69331626	E	20020404	DE 631626	A	19931210	200230
			EP 93119918	A	19931210	

Priority Applications (No Type Date): US 92992116 A 19921217; US 94200211 A

19940223

Cited Patents: No-SR.Pub; EP 194338; EP 286756; US 4287892; US 4569332; WO 9013322

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 604803		A2 E 16	A61M-001/00	
Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE				
US 5330451	A		A61M-005/31	
CA 2110842	A		A61M-025/00	
EP 604803	A3		A61M-001/00	
US 5599329	A	13	A61M-025/00	Div ex application US 92992116 Div ex patent US 5330451

EP 604803 B1 E A61M-001/10

Designated States (Regional): DE ES FR GB IT

DE 69331626 E A61M-001/10 Based on patent EP 604803

Abstract (Basic): EP 604803 A

A perfusion **cannula** for artery insertion specifically includes a hollow flexible trocar (1) which contains a guide wire (52) and which has a pointed head (49,51) provided with holes (50) for blood and air flow past an end **plug**.

The **cannula** has a port for connection to a balloon pump and a port connectable to a blood pressure monitoring **tube**, and its main channel is connectable to a cardiopulmonary bypass.

USE - Open heart surgery.

Dwg. 9/9

Abstract (Equivalent): US 5599329 A

A perfusion **cannula** for insertion into an artery, a main channel fluidly connected to an intra-aortic portion of the **cannula**, the main channel in fluid connection with an aortic perfusion line of a cardiopulmonary bypass, the portion having a proximal end adjacent the main channel and a distal end remote from the main channel, a first side port adapted for fluid connection to a balloon pump at a remote end and in fluid connection with the portion at a near end, a blood pressure port fluidly connected to a blood pressure monitoring **tube**, the **tube** being within the portion and extending to a pressure point upstream of the distal end, the **tube** being adapted for connection to a blood pressure monitoring device and a girdle surrounding a part of the artery, the **cannula** extending through the girdle into the artery.

Dwg. 1/9

US 5330451 A

A perfusion **cannula** is for insertion into an artery with a main channel fluidly connected to an intra-aortic portion of the **cannula**. The main channel is in fluid connection with an aortic perfusion line of a cardiopulmonary bypass. The portion has a proximal end adjacent the main channel and a distal end remote from the main channel. A first side portion is adapted for fluid connection to a balloon pump at a remote end and is in fluid connection with the portion at a near end. A blood pressure port is fluidly connected to a blood pressure monitoring **tube**, the **tube** being within the portion and extending to a pressure point upstream of the distal end. The **tube** is adapted for connection to a blood pressure monitoring device.

Derwent Class: A96; P31; P32; P34

International Patent Class (Main): A61M-001/00; A61M-001/10; A61M-005/31; A61M-025/00

International Patent Class (Additional): A61B-017/34 ; A61F-002/06

Serial 110941
 December 30, 2003

13/7, K/2 (Item 2 from File: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

007768107 **Image available**

WPI Acc No: 1989-033219/198905

Male ureter implantable closure - consists of tubular valve body with releasable plug fitted in outer end

Patent Assignee: BADER P (BADE-I)

Inventor: BADER P

Number of Countries: 033 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 301292	A	19890201	EP 88110928	A	19880708	198905	B
DE 3821631	A	19890209	DE 3821631	A	19880627	198907	
WO 8900843	A	19890209	WO 88DE456	A	19880722	198908	
AU 8820786	A	19890301				198923	
DE 3821631	C	19891102				198944	
US 4934999	A	19900619	US 88225172	A	19880728	199027	
EP 301292	B	19911211				199150	
DE 3866816	G	19920122				199205	

Priority Applications (No. Type Date): DE 3821631 A 19880627; DE 3724875 A 19870728

Cited Patents: DE 2431888; DE 504554; DE 602099; US 4183358; US 4555242

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 301292 A G 9

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

DE 3821631 A 7

WO 8900843 A G

Designated States (National): AT AU BB BG BR CH DK FI GB HU JP KP KR LK
LU MC MG MW NL NO RO SD SE SU US

Designated States (Regional): OA

EP 301292 B

Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE

Abstract (Basic): EP 301292 A

The closure consists of a **tubular** body which is inserted into the ureter. The **tubular** body consists of a main part (1), at least one intermediate part (2), and an end part (3), with each part having a longitudinal through hole (8) and forming a valve body (4, 5).

The end of the **main** part is fitted with a **plug** (9) and is enclosed in a double-membrane, flexible **tube** (10, 11). In addition, the main part has at least one radial hole (12) in its wall at the outer end.

USE/ADVANTAGE - For incontinence control, with reliable seal and no need for removal for urine passing.

1/5

Abstract (Equivalent): EP 301292 B

A seal for a male urethra, which is formed from an elongate body to be introduced into the urethra and secured therein, characterised in that the elongate body is formed from a base body (1) or from a base body (1) with at least one intermediate element (2) and an end element (3), and thus forms a one-section or multi-section cylindrical valve body (4 and 5), open at both sides, with a continuous longitudinal bore (8), wherein the valve body (4 and 5) has at least on its front end a detachably arranged seal (9) and wherein the valve body jacket is

Serial 110941

December 30, 2003

encased partially by a double membrane ~~tube~~ 10,11), acted upon by pressure, in that the double membrane ~~tube~~ (10,11) is formed by an internal jacket membrane (10), which lies evenly against the valve body (4 and 5) and an external extensible membrane (11), and in that the base body (1) has in the front region at least one radial bore (12), and in that the internal jacket membrane has in the region of the radial bore (12) an air - passage opening (18). (10pp)

Abstract (Equivalent): US 4934999 A

The closure device for a male urethra, is formed by an elongated valve device to be inserted into the urethra and to be releasably fastened. The elongated object may be formed by a single basic body element, or by a basic body element combined with at least one intermediate element and an end element. The valve is open at both ends and includes a longitudinal through hole.

The valve body, at least on its front end, includes a removable closure plug. The valve body is partly enclosed by a double-membrane tube that can be pressurised and expanded to secure the device within the urethra. The basic body element of the valve body is provided with at least one radial hole to permit the introduction of fluid such as air into a space between an inner and outer membrane which comprise the double membrane ~~tube~~ or sleeve.

USE - For contraception

Derwent Class: P32; P34

International Patent Class (Additional): A61F-002/48 ; A61F-005/42 ;
A61F-006/02 ; A61M-029/02

18/7,K/1 (Item 1 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

009452264 **Image available**

WPI Acc No: 1993-145789/199318

Device for preventing air escaping from percutaneous gastrostomy tube - has plug through which guide wire passes in communication and has cylindrical member with longitudinal bore

Patent Assignee: SANDOZ NUTRITION LTD (SANO) ; SANDOZ LTD (SANO)

Inventor: KIRBY D F; MICHELS L D; REUNING F K

Number of Countries: 017 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 540465	A1	19930505	EP 92810800	A	19921020	199318 B
US 5259367	A	19931109	US 91783051	A	19911025	199346

Priority Applications (No Type Date): US 91783051 A 19911025

Cited Patents: DE 9112338; EP 256546; EP 370720; US 4726374

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 540465	A1 E	5	A61J-015/00	

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LI LU NL
PT SE

US 5259367 A 4 A61B-001/26

Abstract (Basic): EP 540465 A

A cylindrical member is provided on an external end. The cylindrical member has a longitudinal bore for receiving the guide wire in slidable communication with the bore. This allows movement of the guide wire through the gastrostomy tube into the stomach while preventing stomach air flow out of the gastrostomy tube.

The cylindrical member has a tube-like portion adapted to receive a

stopper. The **stopper** is appendaged to the tube-like portion of the cylindrical member by a flexible connector.

USE - During placement of a feeding tube guide wire through a gastrostomy tube.

Dwg.1/3

Abstract (Equivalent): US 5259367 A

The method comprises providing a substantially cylindrical plug on an external end of the gastrostomy tube. The **plug has a longitudinal bore** through which the guide wire passes in slidale communication while substantially preventing stomach air flow out of the gastrostomy **tube**. It involves placing the guide wire through the **bore** and the gastrostomy **tube** into the stomach.

The cylindrical plug member has a tube-like portion adapted to receive a stopper.

USE - For the prevention of air escaping from a stomach during the placement of a guide wire through a percutaneous gastrostomy tube.

Dwg.1/3

Derwent Class: P31; P33

International Patent Class (Main): A61B-001/26 ; A61J-015/00

18/7,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

001513889

WPI Acc No: 1976-H6821X/197635

Respiratory system with ventilator - has diaphragm valve closed by atmospheric pressure to maintain expiration pressure at end of cycle

Patent Assignee: PHILIPS ELTRN LTD (PHIG)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 1447091	A	19760825				197635 B

Priority Applications (No Type Date): GB 7343090 A 19730913

Abstract (Basic): GB 1447091 A

Respiratory system for maintaining a positive pressure of expired gas at the end of each respirator cycle and for offering minimal resistance to airflow from the lungs until the end pressure is reached comprises a ventilator and a pressur controlled valve. The valve has a chamber divided into two compartments (1, 2) by a diaphragm (3), one chamber (1) having an **inlet aperture** (4) connected to the expiratory tube of the ventilator and an outlet **aperture** (5). A flat **stopper** (6) passes through and is connected to, the diaphragm (3) and the second chamber is subjected to a pressure which is at least atmospheric, so that the **stopper** normally seals the outlet **aperture** (5), but opens it when the pressure due to the expiratory gas on the diaphragm in the first compartment (1) exceeds the pressure applied to the side of the diaphragm in the second compartment

Derwent Class: P33; Q66

International Patent Class (Additional): A61H-031/00 ; F16K-017/02

18/7,K/3 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

05834949

MANUFACTURE OF BLOOD SAMPLING TUBE CONTAINING ANTICOAGULANT

PUB. NO.: 10-118049 [JP 10118049 A]

Serial 110941

December 30, 2003

PUBLISHED: May 12, 1998 (19980512)

INVENTOR(s): SUZUKI MASARU

MURAKAMI KAZUNORI

IKEDE JUNJI

APPLICANT(s): NISSHO CORP [470126] (A Japanese Company or Corporation), JP
(Japan)

APPL. NO.: 08-276193 [JP 96276193]

FILED: October 18, 1996 (19961018)

ABSTRACT

PROBLEM TO BE SOLVED: To keep activity of heparin for a long period of time by a method wherein a water solution containing heparin and a polypeptide fraction derived from collagen with a specified value of average mol.wt. is applied by spraying on the inner wall of a blood sampling tube and it is dried with air flow at a specified temperature

SOLUTION: In a blood sampling tube consisting of a bottomed tube wherein one end is opened and another end is enclosed and a plug body for sealing hermetically the opening of the bottomed tube, a water solution containing heparin and a polypeptide fraction derived from collagen with an average mol.wt. of 10,000-100,000 is applied by spraying on the inner wall of a blood sampling tube and it is dried with air flow at 30-80 deg.C to prepare a blood sampling tube containing an anticoagulant. Here, heparin is sodium heparin or lithium heparin. In addition, flow rate of the air flow is made to be 0.2-2.5m/hr. It is possible thereby to stably keep heparin for a long time and to shorten manufacturing time and to reduce cost and furthermore, to obtain good solubility with blood and an accurate inspection result.

INTL CLASS: A61B-005/14

26/26, TI/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015339829

WPI Acc No: 2003-400767/200338

Apparatus for diluting bone cement and introducing the same into medullary canal

26/26, TI/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.*

013907549

WPI Acc No: 2001-391762/200142

Needle assembly for medical purposes, comprises needle, elongate blunting device, blunt holder, shifter that can be actuated to move blunt holder relative to needle, and flash chamber

26/26, TI/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013304377

WPI Acc No: 2000-476312/200042

Multi-function medical health care bag for male and female sex organ

26/26, TI/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

012794837

Serial 110941
 December 30, 2003

WPI Acc No: 1999-601067/199951

Implanting device for small diameter capillary graft

26/26, TI/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.
 012102708

WPI Acc No: 1998-519619/199844

Female urinary plug for patients suffering from incontinence - has infection protection cap which prevents inflation of the soft balloon, and whose distal end has collet-like shape and is provided with expandable petal-like tongues

26/26, TI/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.
 010282454

WPI Acc No: 1995-183712/199524

Foot prosthesis - has compressed air chambers with bushes and nipples, with three rear chamber sections linked by apertures

26/26, TI/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.
 003954008

WPI Acc No: 1984-099552/198416

Plug for dental surgery - has casing which is impregnated with medicinal substances

26/7, K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.
 013084450 **Image available**

WPI Acc No: 2000-256322/200022

Transportable apparatus for the treatment of Meniere's disease and other ear pressure conditions using electronically controlled pressure to protect delicate parts from damage and dirt which allows self-administration

Patent Assignee: PASCAL MEDICAL AB (PASC-N)*

Inventor: ENGVALL D; NILSSON A

Number of Countries: 047 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200010484	A2	20000302	WO 99SE1354	A	19990809	200022 B
AU 9956634	A	20000314	AU 9956634	A	19990809	200031
EP 1107713	A2	20010620	EP 99943563	A	19990809	200135
			WO 99SE1354	A	19990809	
JP 2002523135	W	20020730	WO 99SE1354	A	19990809	200264
			JP 2000565809	A	19990809	

Priority Applications (No Type Date): SE 982771 A 19980819

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200010484	A2	E	15	A61F-000/00	

Designated States (National): AU BG BR CA CN CZ EE HR HU IL JP KR KZ LT
 LV MX NO NZ PL RO RU SG SI SK TR UA US ZA

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU
 MC NL PT SE

Serial 110941
 December 30, 2003

AU 9956634 A A61F-000/00 Based on patent WO 200010484
 EP 1107713 A2 E A61F-005/00 Based on patent WO 200010484
 Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
 LT LU LV MC NL PT RO SE SI
 JP 2002523135 W 13 A61F-011/00 Based on patent WO 200010484
 Abstract (Basic): WO 200010484 A2

NOVELTY - An electronically controlled pressure generating unit is housed in a casing. Pressurized air from the unit is delivered through a plastic tube (11) on the end of which is an ear plug (13) which can be inserted into a patient's ear. The flexible tube extends through a circular opening to be stored in an elliptical circumferential groove.

DETAILED DESCRIPTION - The pressure generating unit is a diaphragm pump driven by an electric motor which is controlled by a microprocessor which controls the generation of pressure pulses.

USE - Treatment of Meniere's disease and other conditions affecting the internal pressure of the ear.

ADVANTAGE - Portable device suitable for self-administration of treatment with protection against damage to sensitive parts and to the infiltration of dirt.

DESCRIPTION OF DRAWING(S) - The figure shows a side view of the invention with the casing cover open.

flexible tube (11)

ear plug (13)

pp; 15 DwgNo 1/3

Derwent Class: P32; S05

International Patent Class (Main): A61F-000/00 ; A61F-005/00 ;
 A61F-011/00

26/7, K/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

003751315

WPI Acc No: 1983-747521/198335

Inflatable pad to reduce haemorrhage after childbirth - has inflatable envelope attached to plastics plug with air inlet and outlet

Patent Assignee: FOURNIER A (FOUR-I)

Inventor: FOURNIER A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 1150121	A	19830719				198335 B

Priority Applications (No Type Date): CA 364844 A 19801117

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CA 1150121	A	4		

Abstract (Basic): CA 1150121 A

The inflatable pad is used to arrest haemorrhage in the uterus and vagina of a woman after childbirth. It has an inflatable envelope attached to a plastics plug with two flow passages. The first is connected to a flexible rubber tube for air under pressure to inflate the envelope, and which has an air pressure gauge and one-way filling valve. The second passage has a threaded opening to vent the envelope and release pressure from the uterus.

The envelope surrounds and is fixed to the plastics plug.

0/2

Serial 110941

December 30, 2003

Derwent Class: P32

International Patent Class (Additional): A61F-005/46 ; A61F-013/20

26/7,K/10 (Item 1 from file: 347)

DIALOG(R) File 347:JAPIO

(c) 2003 JPO & JAPIO. All rts. reserv.

03087967 **Image available**

AUXILIARY BLADDER DEVICE

PUB. NO.: 02-063467 [JP 2063467 A]

PUBLISHED: March 02, 1990 (19900302)

INVENTOR(s): UMEMURA YOSHIHIRO

NISHIMURA SEIICHIRO

APPLICANT(s): UNITIKA LTD [000450] (A Japanese Company or Corporation), JP
(Japan)

APPL. NO.: 63-217259 [JP 88217259]

FILED: August 30, 1988 (19880830)

ABSTRACT

PURPOSE: To enable a bladder to repeat expansion and contraction smoothly at a specified period by a method wherein a communication tube is extended along the outside of an outer tube, and is opened in a level higher than that of the upper top part of a siphon tube.

CONSTITUTION: A communication **tube** 16 having the one end communicated with the lower part of an inner **tube** 11 is extended along the outside of an outer **tube** 12, and the tip thereof is opened in a level higher than that of the top part of a siphon 10. The one end of the communication **tube** 16 is coupled with the inner **tube** 11 in a position below the lower end part of the outer **tube** 12 in a pressure regulating chamber 3. A **tube** 4 intercoupling an urine introduction **catheter** 2 and a lower coupling port 3h of the pressure regulating chamber 3 and an urine storage chamber 5 in which urine flows through an upper **opening** part are formed. The urine storage chamber 5 is coupled to the pressure regulating chamber 3 through the inner **tube** 11 of the siphon **tube** 10. A bacteria flowing-upstream blocking device 3, a ventilation port 6, a bacteria removing filter 7 situated in the ventilation port 6, a drainage port 8 formed in the lower part of the urine storage chamber 5, and the **stopper** of the drainage port 8 are provided. The pressure regulating chamber 3 is provided with a ventilation port 14 through which air is discharged and supplied due to filling and drainage of urine, and a vent resistant filter 15 inserted in the ventilation port 14.

INTL CLASS: A61M-001/00; A61F-005/44

Serial 110941

December 30, 2003

File 348: EUROPEAN PATENTS 1978-2003/Dec W02

File 349:PCT FULLTEXT 1979-2002/UB=20031225,UT=20031218

Set	Items	Description
S1	14107	CANNULA? ?
S2	539039	CATHETER? ? OR TUBE OR TUBES OR TUBING OR TUBUL? OR PIPE OR PIPES OR PIPET? OR CONDUIT?
S3	12155	BOREHOLE? OR VENTHOLE? OR (BORE OR VENT) () (HOLE OR HOLES)
S4	496426	APERTURE? OR OPENING? OR BORE OR BORES
S5	133393	PLUG? OR STOPPER?
S6	63740	AIRFLOW? OR AIRSTREAM? OR AIR() (FLOW? OR STREAM? OR PASSAGE?)
S7	331	LIPOSUCTION? OR LIPECTOMY OR LIPOLYS? S(S) SUCTION? OR BODY(-) (CONTOUR? OR SCULPT?) (2N) SURGER???
S8	82266	IC=A61B OR IC=A61F
S9	253	S1:S2(S)S3:S4(S)S5(S)S6
S10	0	S7(S)S9
S11	15	S8 AND S9
S12	1	S1(S), S3 , S4 , S5
S13	0	S12 NOT S11
S14	262749	HOLE OR HOLES
S15	436460	AIR
S16	2095	S1:S2(S)(S3:S4 OR S14)(S)S5(S)(S15 OR S6)
S17	2	S7 AND S16
S18	1	S17 NOT S11
S19	1	S7 AND S9
S20	0	S19 NOT S11

11/6/4 (Item 4 from file: 348)

00246801

Device for driving tools in orthopedic surgery.

11/6/8 (Item 4 from file: 349)

00981676 **Image available**

INFLATABLE ARTICLES WITH SELF-CONTAINED INFLATION MECHANISM

11/6/11 (Item 7 from file: 349)

00809187 **Image available**

SLANT FABRIC SPIROMETER DESIGN

11/3,AB,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

01548907

Blood gas syringe having improved blood barrierSpritze zur Gewinnung von Gasen im Blut, mit verbesserter BlutsperreSeringue pour obtenir du gaz du sang ayant une barriere pour le sang amelioree

PATENT ASSIGNEE:

Becton, Dickinson and Company, (2594835), 1 Becton Drive, Franklin Lakes, New Jersey 07417-1880, (US), (Applicant designated States: all)

INVENTOR:

Cohen, Richmond R., 2650 Waldman Drive, Apt.5, Williamsport, Pennsylvania 17701, (US)

Keusch, Preston, 3 Belfast Avenue, Hazlet, New Jersey 07730, (US)

LEGAL REPRESENTATIVE:

von Kreisler, Alek, Dipl.-Chem. et al (12437), Patentanwalte, von Kreisler-Selting-Werner, Bahnhofsvorplatz 1 (Deichmannhaus), 50667 Koln

(DE)

PATENT (CC, No, Kind, Date): EP 1287784 A1 030305 (Basic)
APPLICATION (CC, No, Date): EP 2002018947 020826;
PRIORITY (CC, No, Date): US 942401 010830
DESIGNATED STATES: DE; FR; GB; IT
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: A61B-005/15 ; A61L-033/00; A61L-031/14
ABSTRACT EP 1287784 A1

A blood gas syringe includes a porous plastic **plug** having a crosslinked hydrogel affixed to a wall of a passageway of the **plug**. When a blood sample is taken with the syringe, the incoming sample **forces air in the system out through the passageway of the plug** until the sample contacts the hydrogel, causing the passageway to seal shut.

ABSTRACT WORD COUNT: 60

NOTE: Figure number on ~~first~~ page: NONE

LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200310	233
SPEC A	(English)	200310	2035
Total word count - document A			2268
Total word count - document B			0
Total word count - documents A + B			2268

...SPECIFICATION irradiation, the plugs were dried at 70(degree)C overnight to remove all moisture.

The **plug**-plunger rods were then manually assembled into complete prototype 3-mL syringes. To test for...
...was sealed off with adhesive (Loctite 4061). Also, a pressure gauge was hooked into the **tubing** carrying the air. **Opening** a valve activated the flow of air. The valve was adjusted until the pressure on...
...psi. The syringe and T-adapter-assembly were then immersed in a water bath. The **air flowed** into the tip of the syringe, through the treated porous **plug**, and out the distal end of the syringe, producing visible bubbling in the bath. Then...
...Brand Critical Care ~~Blood~~ Collection System, 3-mL Preset(TM)). This demonstrated that the prototype **plugs** were still permeable to gas after treatment...

11/3, AB, K/2 (Item 2 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS
(c) 2003 European Patent Office. All rts. reserv.
00584854

DISPOSABLE ELECTROCAUTERY/CUTTING INSTRUMENT WITH SMOKE EVACUATION
EINWEGINSTRUMENT ZUM ELEKTRISCHEN BRENNEN ODER SCHNEIDEN MIT RAUCHABZUG
BISTOURI/ELECTROCAUTERE JETABLE A EVACUATION DE FUMEE

PATENT ASSIGNEE:

KAUFMAN, David I., (1595720), 284 Sunkist Lane, Los Altos, CA 94022, (US)
, (Proprietor designated states: all)

INVENTOR:

KAUFMAN, David I., 284 Sunkist Lane, Los Altos, CA 94022, (US)

LEGAL REPRESENTATIVE:

Findlay, Alice Rosemary (69451), Lloyd Wise, Tregeare & Co., Commonwealth House, 1-19 New Oxford Street, London WC1A 1LW, (GB)

PATENT (CC, No, Kind, Date): EP 588986 A1 940330 (Basic)
EP 588986 B1 010919
WO 9222258 921223

APPLICATION (CC, No, Date): EP 92918584 920611; WO 92US4837 920611

PRIORITY (CC, No, Date): US 713070 910611

DESIGNATED STATES: BE; DE; ES; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: A61B-018/08 ; A61B-018/12

NOTE: No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
----------------	----------	--------	------------

CLAIMS B	(English)	200138	510
----------	-----------	--------	-----

CLAIMS B	(German)	200138	511
----------	----------	--------	-----

CLAIMS B	(French)	200138	551
----------	----------	--------	-----

SPEC B	(English)	200138	5603
--------	-----------	--------	------

Total word count - document A		0	
-------------------------------	--	---	--

Total word count - document B		7175	
-------------------------------	--	------	--

Total word count - documents A + B		7175	
------------------------------------	--	------	--

...SPECIFICATION the surgeon secures the provided holster 76 and a length of joined electrical cable and **tubing** 82 to the surgical drape in his or her customary fashion. The electrical connector 26 and joined cable and **tubing** 82 are then passed off the surgical field to the circulating nurse, who connects the standard end of the suction **tubing** 30 to a standard suction canister (not shown) and turns the vacuum on. An adequate length of electrical cable 24 is separated from the joined **tubing** and cable 82, and the electrical connector 26 which terminates the cable 24 is **plugged** into a radio frequency power generator, also commonly called a Bovie unit (not shown). The...

....blade tip 48, the smoke is drawn continuously and unobtrusively into the annular suction intake **aperture** 36 at high velocity, allowing no smoke to escape and disperse above the field. No...how the instrument 22 itself is rotated. The radiused leading edge 38 of the intake **aperture** 36, which is rounded and smooth, effectively decreases **airflow** turbulence at the edge. This allows a greater **airflow** velocity and more efficient smoke evacuation. The smooth leading edge 38 also presents a non...

11/3, AB, K/3 (Item 3 from file: 348)

DIALOG(R) File 348: EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

00411136

SELF-SEALING FLUID CONDUIT AND COLLECTION DEVICE.

SELBSTDICHTENDE FLUSSIGKEITSROHRE UND GERÄTE ZUR SAMMLUNG DIESER FLUSSIGKEIT.

DISPOSITIF D'ACHEMINEMENT ET DE COLLECTE D'UN FLUIDE A FERMETURE HERMETIQUE.

PATENT ASSIGNEE:

SAFE-TEC CLINICAL PRODUCTS, INC., (1215850), 163 Railroad Drive, Ivyland, PA 18974, (US), (applicant designated states:
AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

COLEMAN, Charles, M., 958 Washington Road, Pittsburgh, PA 15228, (US)
KENDRICK, William, G., Sr., 34 Willowbrook Dr., Doylestown, PA 18901, (US)

LEGAL REPRESENTATIVE:

Marshall, John Grahame et al. (33541), SERJEANTS 25 The Crescent King Street, Leicester LE1 6RX, (GB)

PATENT (CC, No, Kind, Date): EP 435908 A1 910710 (Basic)
EP 435908 B1 950329

WO 9002516 900322

APPLICATION (CC, No, Date): EP 89910489 890911; WO 89US3956 890911

Serial 110941

December 30, 2003

PRIORITY (CC, No, Date): US 243982 880913

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: A61B-005/14 ; B01L-003/14

NOTE: No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB95	576
CLAIMS B	(German)	EPAB95	527
CLAIMS B	(French)	EPAB95	653
SPEC B	(English)	EPAB95	5836
Total word count - document A			0
Total word count - document B			7592
Total word count - documents A + B			7592

INTERNATIONAL PATENT CLAIMS A61B-005/14 ...*

...SPECIFICATION and the plug thereby blocking water flow from the blood into the plug.

The collection **tube** may be used in a specimen transfer mode without centrifugal separation if a vent channel...

...collection device. A simple integrated device would add a cap at the end of the **tube** and closely adjacent to the sealed self-sealing **plug**. The **tube** will hold the aqueous specimen in the **tube** by air pressure when the specimen is collected, the fluid contacts the vent channel, and the **plug** thereupon sealed. When it is desired to transfer an unseparated specimen, such as is the case with micro-specimens for blood gas analysis; a hypodermic needle, or a small **bore** molded **cannula** with sharper point is pressed through the **plug** to permit **air** flow to proceed through the sealed **plug**, and allow transfer of the collected fluid out of the collection **tube**, and into the receptacle. Preferably, this needle is incorporated into a cap which fits over the **plugged** end of the **tube**. This is the simplest way to dispense collected specimens, but not the most precise...

11/3, AB, K/5 (Item 1 from file: 349) *

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

01059264

DEVICE FOR AND METHOD OF REMOVING DELETERIOUS BODY TISSUE FROM A SITE
WITHIN A PATIENTDISPOSITIF ET PROCEDE D'EXTRACTION D'UN TISSU ORGANIQUE DELETERE SITUE A
L'INTERIEUR DU CORPS D'UN PATIENT

Patent Applicant/Assignee:

SPIRATION INC, 18109 N.E. 76th Street, Redmond, WA 98052, US, US
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

BARRY Robert Lawrence, 13608 - 88th PI N.E., Kirkland, WA 98033, US, US
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

KNOBBE Louis J (et al) (agent), Knobbe, Martens, Olson & Bear, 2040 Main
Street, Fourteenth Floor, Irvine, CA 92614, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200388859 A1 20031030 (WO 0388859)

Application: WO 2003US5888 20030225 (PCT/WO US0305888)

Priority Application: US 2002124780 20020416

Parent Application/Grant:

Related by Continuation to: US 2002124780 20020416 (CON)

Serial 110941

December 30, 2003

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 4797.

English Abstract

A device, system, and method provides for removing deleterious tissue from healthy body tissue at a site inside a patient. The device includes a steerable electrosurgery device (88) having a electrode (98) to cut a core through tissue, including tissue surrounding a perimeter of the deleterious tissue, and a lumen (in 98) for aspirating the cored tissue from the patient. The electrode may form a closed loop, and may be the active electrode of an electrosurgery system. Further, the electrode may have a narrow profile. In addition, the electrode may be arranged to coagulate the cut tissue. The system includes the device and a seal to limit air leaks and bleeding from the removal of cored tissue.

Main International Patent Class: A61B-018/18

Fulltext Availability: Detailed Description

Detailed Description

... is the peripheral surface of a plug that fills the entire cross-section of the air passageway, including the cored hole opening 112. The plug covers and seals the cored hole opening 112.

[471 As can thus be seen from the foregoing, the present invention provides...

11/3, AB, K/7 (Item 30 from file: 349) *

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00992056

CONDUITS HAVING DISTAL CAGE STRUCTURE FOR MAINTAINING COLLATERAL CHANNELS
IN TISSUE AND RELATED METHODS

CONDUITS A STRUCTURE DE CAGE DISTALE POUR LE MAINTIEN DE CANAUX COLLATERAUX
DANS DES TISSUS ET PROCEDES ASSOCIES

Patent Applicant/Assignee:

BRONCUS TECHNOLOGIES INC, Building A, Suite 8, 1400 N. Shoreline Blvd,
Mountain View, CA 94043, US, US (Residence), US (Nationality), (For all
designated states except: US)

Patent Applicant/Inventor:

COOPER Joel D, 2708 Turnberry Park Lane, St. Louis, MO 63131, US, US
(Residence), US (Nationality), (Designated only for: US)

KEAST Thomas, 860 Park Drive #3, Mountain View, CA 94040, US, US
(Residence), US (Nationality), (Designated only for: US)

LOOMAS Bryan, 265 Snow Crest Road, Los Gatos, CA 95033, US, US
(Residence), US (Nationality), (Designated only for: US)

ROSCHAK Ed, 26262 ~~Verona~~ Place, Mission Viejo, CA 92692, US, US
(Residence), US (Nationality), (Designated only for: US)

KAPLAN Gary, 111 Caselli Avenue, San Francisco, CA 94114, US, US
(Residence), US (Nationality), (Designated only for: US)

SAENZ Sandra, 786 Hope Street, #3, Mountain View, CA 94041, US, US

Serial 110941

December 30, 2003

(Residence), US (Nationality), (Designated only for: US)
COLLINSON Mike, 230 Winchester Drive, Goleta, CA 93117, US, US
(Residence), US (Nationality), (Designated only for: US)
REDMOND Russ, 1148 North Fairview Avenue, Goleta, CA 93117, US, US
(Residence), US (Nationality), (Designated only for: US)
VIDAL Claude, 5426 San Patricio Drive, Santa Barbara, CA 93111, US, US
(Residence), US (Nationality), (Designated only for: US)
CHANDOS David, 4213 Sirius Avenue, Lompoc, CA 93436, US, US (Residence),
US (Nationality), (Designated only for: US)
BIGGS Michael, 639 Azevedo Court, Santa Clara, CA 95051, US, US
(Residence), US (Nationality), (Designated only for: US)
KARABEY Halil, 4515 ~~Grimby~~ Drive, San Jose, CA 95130, US, US (Residence),
US (Nationality), (Designated only for: US)
TANAKA Don, 18774 Devon Avenue, Saratoga, CA 95070, US, US (Residence),
US (Nationality), (Designated only for: US)
THOMPSON David, 793 Almondwood Way, San Jose, CA 95120, US, US
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

BATT Richard R (et al) (agent), Morrison & Foerster LLP, 755 Page Mill
Road, Palo Alto, CA 94304-1018, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200320338 A2-A3 20030313 (WO 0320338)

Application: WO 2002US28237 20020904 (PCT/WO US0228237)

Priority Application: US 2001317338 20010904; US 2001947144 20010904; US
2001334642 20011129; US 2002367436 20020320; US 2002374022 20020419; US
2002387163 20020607

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU
CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ ~~DK~~ EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
(OA) BF BJ CF CG CI ~~CM GA~~ GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 22563

English Abstract

Devices and related methods are directed to altering gaseous flow within a lung to improve the expiration cycle of an individual having Chronic Obstructive Pulmonary Disease. More particularly, conduits (200) maintain collateral openings or channels through the airway wall so that air is able to pass directly out of the lung tissue to facilitate both the exchange of oxygen ultimately into the blood and to decompress hyper-inflated lungs. The conduits include a center section (310) with a passageway extending through the center section. The conduits further include a distal cage (216) structure which has a passageway and at least one opening in fluid communication with the center section passageway. The medical kits disclosed herein are also directed to maintain collateral openings through airway walls.

Main International Patent Class: A61B-018/18

Fulltext Availability: Claims

Claim

... by reference in its entirety.

FIELD OF THE INVENTION

[0002] The invention is directed to conduits for altering gaseous flow

within a lung to improve the expiration cycle of an individual, particularly individuals having Chronic Obstructive Pulmonary Disease. The conduits maintain collateral openings or channels through the airway wall so that air is able to pass directly out... . . . exchange of oxygen ultimately into the blood and/or to decompress hyper-inflated lungs. The conduits generally include a center section having a passageway for air to flow through and a... . . . section passageway. The invention is also directed to methods and medical kits for maintaining collateral openings through . . . natural respiratory airway, hereafter referred to as a natural airway or airway, consisting of branching tubes which become narrower, shorter, and more numerous as they penetrate deeper into the lung. Specifically...at a satisfactory rate. [00101 One further aspect of alveolar wall destruction is that the airflow between neighboring air sacs, known as collateral ventilation or collateral air flow, is markedly increased as when compared to a healthy lung. While alveolar wall destruction . . .in the small, airways. Excessive amounts of mucus are found in the airways and semisolid plugs of this mucus may occlude some . . .includes bronchodilator drugs, and lung volume reduction surgery. The bronchodilator drugs relax and widen the air passages thereby reducing the residual volume and increasing gas flow permitting more oxygen to enter the...the respiratory muscles. However, lung volume reduction surgery is an extremely traumatic procedure which involves opening the chest and thoracic cavity to remove a portion of the lung. As such, the...of the lung, or the @ entire lung is emphysematous. The production and maintenance of collateral openings through an airway wall allows air to pass directly out of the lung tissue responsible for gas exchange. These collateral openings serve to decompress hyper inflated lungs and/or facilitate an exchange of oxygen into the...to devices and methods for altering gaseous flow in a lung. The invention includes a conduit for maintaining the patency of an opening in tissue. In one variation of the present invention, a conduit comprises a center section having a first end, a second end and a center-section passageway extending from the first end to the second end. The conduit further comprises a plurality of first extension members extending from the first end. The first extension members are outwardly deflectable about the first end of the center section. The conduit further comprises a cage structure adjacent to the 5 second end of the center section. The cage structure has at least one opening and a cage passageway in fluid communication with the center-section passageway. [00181 The cage... . . .may be formed of a plurality of cage segments or members. Also, portions of the conduit may be coaxially surrounded with a tissue barrier or membrane to prevent tissue growth into the passageway of the conduit. [00191 The conduit may have an undeployed state for facilitating delivery of the conduit to a target site and a deployed state, different than the undeployed state, for maintaining... . . .of a channel in an airway wall. In this variation of the present invention the conduit comprises a radially expandable frame having a proximal section, a center section and a distal...second end. The distal section of the frame comprises a cage having at least one opening and a cage passage which is in fluid communication with the center-section passage. When the conduit is in the undeployed state the proximal section, the center section, and the distal. section have a reduced profile. When the conduit is in the deployed state, the plurality of extension members deflect outward forming a non...and the cage. has an

Serial 110941
December 30, 2003

expanded profile greater than that of the cage when the conduit is in the undeployed state. Additionally, a biocompatible coating may coaxially surround at least a portion of the frame. [00201] In another variation of the present invention a **conduit** comprises a center section having a proximal end, a distal end, and a passage within the center section extending, between the ends. The **conduit** further comprises a plurality of extension members with at least one proximal extension member and...of the ends of the center section to retain tissue between the extension members. The **conduit** further includes 6 a cage adjacent to the distal end of the center section. The cage has at least one. **opening** and a passage in fluid communication with the center section passage. [00211] A ...from one open end to a second open end. The medical device may be a **conduit** as recited herein. Also, the deploying step may be carried out using a balloon **catheter** having an inflatable member. The method may also comprise delivering a bioactive substance to the tissue. The bioactive substance may be a coating on the **conduit**. Additionally, the substance may be delivered by a delivery **catheter** prior to deploying the **conduit**. [00221] A kit comprises a **conduit** as -recited herein. The kit additionally comprises a deployment **catheter** to deploy the **conduit**. The deployment **catheter** may be a balloon **catheter**. The kit may further comprise an instrument for creating holes in an airway wall. The...
...blood-gas interface. [00241] Figures 1D and 1E illustrate a schematic of a lung having **conduits** deployed in. channels to alter **airflow** through the lung. [00251] Figure 2A illustrates a planar view of a surface of a variation of a **conduit**. [00261] Figure 2B illustrates a perspective view of the **conduit** of Figure 2A in an undeployed state. [0027] Figure 2C illustrates a perspective view of the **conduit** of Figure 2A in a deployed state. [00281] Figure 3 illustrates an unexpanded planar view of a surface of a variation of a **conduit** in which cage members extend perpendicularly to distal extension members prior to deployment of the device. 100291 Figures 4 and 5 illustrate planar views of variations of **conduits**. [0030] Figure 6 illustrates a planar view of a variation of a **conduit** wherein the proximal and distal extension members are in an alternating pattern. 7
[00311] Figure 7A illustrates a planar view of a variation of a **conduit** of the present invention wherein the cage is attached to distal extension members. [0032] Figure 7B illustrates a perspective view of the **conduit** of Figure 7A in a deployed state. [00331] Figure 8A illustrates a planar view of a variation of a **conduit** wherein the distal extension member is non-planar. [0034] Figure 8B illustrates a side view of the **conduit** of Figure 8A. [0035] Figure 8C illustrates a perspective view of the **conduit** of Figure 813. 100361 Figure 9A illustrates a planar view of a variation of a **conduit**. [00371] Figure 9B illustrates a perspective view of the **conduit** of Figure 9A in an undeployed state. [00381] Figure 9C illustrates a perspective view of the **conduit** of Figure 9A in a deployed state. [0039] Figure 9D illustrates a perspective view of another **conduit** in a deployed state. [00401] Figure 9E illustrates a side view of a **conduit** in an un-deployed state. [00411] Figure 9F illustrates a side view of the **conduit** of Figure 9E shown in a deployed state. [00421] Figure 9G illustrates a front view of the **conduit** shown in Figure 9F. [00431] Figure 9H is a cylindrical projection of the undeployed **conduit** shown in Figure 9E. [0044] Figure 9I illustrates a side view of another **conduit** in an undeployed state. [0045] Figure 9J illustrates a side view of the **conduit** of Figure 9I in a deployed state. [0046] Figure 9K is a cylindrical projection of the undeployed

conduit shown in Figure 9I. [00471 Figures 9L-9P illustrate variations of conduits. [00481 Figures 10A- 10D illustrate a variation of the conduit having length-increasing portions on the cage members of the conduit. [00491 Figure I 1 illustrates a cross sectional view of a variation of a conduit having an inner covering. [00501 Figures 12A-12B illustrate views of a conduit having a filler material between openings in ribs. [00511 Figures 13A-13C illustrate views of a conduit having reduced thickness or weakened sections. [00521 Figure 14A illustrates a variation of a conduit having a tissue barrier. [00531 Figure 14B illustrates a side view of another conduit having a tissue barrier. 8

[00541 Figure 14C is a front view of the conduit shown in Figure 14B. [00551 Figure 14D illustrates a conduit positioned in a channel created in a tissue wall. [00561 Figure 14E is a cross sectional view of the conduit shown in Figure 14B taken along line 14E-14E. [00571 Figures 14F-14K illustrate additional variations of conduits. [0058] Figure 15A illustrates a perspective view of another conduit. [0059] Figure 15B illustrates a side view of the conduit of Figure 15A. [0060] Figure 15C-15D illustrate planar views of a surface of the conduit shown in Figure 15A. 100611 Figure 15E and 15F illustrate a side view of the conduit of Figure 15A prior to deployment of the proximal extension members. and cage members. [00621 Figure 16A illustrates a planar view of a surface of a variation of a conduit. [00631 Figure 16B illustrates a perspective view of the conduit of Figure 16A in a deployed state. [00641 Figure 16C illustrates a planar view of another variation of a conduit. [0065] Figure 16D illustrates a side view of the conduit shown in Figure 16C in a deployed configuration. [0066] Figure 16E illustrates a side view of another conduit having a tissue barrier and a visualization marker. [0067] Figure 17A illustrates a side view of another conduit. [0068] Figure 17B illustrates a side view of the conduit shown in Figure 17A after the conduit is deployed. [00691 Figure 17C illustrates a front view of the conduit shown in Figure 17B. [00701 Figures 17D-17E illustrate a variation of a conduit where the conduit comprises a wire or mesh pattern. [0071] Figure 17F illustrates another variation of a conduit. [00721 Figures 18A- I 8F illustrate a method for deployment of a conduit. [0073] Figures 19A- I 9C illustrate the deployment of a conduit. [0074] Figures 20A-20B illustrate the deployment of a conduit. [00751 Figures 2 1 A-21 C illustrate the deployment of a conduit using a balloon catheter. [00761 Figure 21D illustrates another variation of a balloon catheter which may be used to deploy, a conduit. 9

[00771 Figures 22A-22D illustrate another variation of a deployment catheter which may be used to deploy conduits. [00781 Figures 23A-23C illustrate the use of a guide member in assisting the placement of a conduit. [0079] Figure 24 illustrates a variation of a conduit having a one-way valve. [0080] Figures 25A-2513 illustrate a method for deploying a conduit at an angle.

DETAILED DESCRIPTION OF THE INVENTION

[0081 Described herein are devices (and methods) for improving the gas exchange in the lung. In particular, a conduit is described which serves to maintain collateral openings or channels through an airway wall so that air is able to pass directly out... lungs. [00821 By "channel" it is meant to include, but not be limited to, any opening, hole, slit, channel or passage created in the airway

...have well defined boundaries such as, for example, parenchymal tissue. [0083] As stated above, the conduits described herein may improve

Serial 110941

December 30, 2003

airflow through an airway in the lung. Simplified illustrations of various states of a natural airway...IC may be found in the same lung. [0084] Figures 1D and 1E schematically illustrate airflow in a lung 118 when conduits 200 are placed in collateral channels 112. As shown, collateral channels 112 (located in an...
...constricted airways 108 which may ordinarily prevent air from exiting the lung tissue 116. The conduits shown in Figures 1D and ...224 respectively which serve to separate parenchymal tissue, prevent occlusion of the passageway, and improve air - flow through the conduit /collateral channel. The cage or basket structures may vary widely in shape and construction as...00871 Figure 2A illustrates a planar view of a surface of a variation of a conduit 200. For purposes of illustration, the conduit 200 depicted in Figure 2A is shown as though the conduit 200 were longitudinally cut ...show the device in pre-deployed and deployed positions as discussed below. As illustrated, the conduit 200 comprises a center section 202, having proximal 204 and distal 206 ends. Although not...
...center section 202 will define a passage which extends between its ends 204, 206. The conduit 200 also comprises at least one proximal extension member 208 at a proximal 204 end...
...extension member 210 at a distal 206 end of the center section 202. Although the conduit 200 ...and distal extension members 208, 210, the invention is not limited as such. [0088] The conduits 200 of the present invention are not limited to any particular number of extension members...
...proximal extension members may differ from the number of distal extension members for a particular conduit . The extension members will be selected such that they contain a fixed end that is...center section. When the extension
I 1
members rotate about the center section of the conduit , they are able to retain tissue therebetween thus preventing significant migration of the conduit . Accordingly, one function of the extension members is that they prevent migration of the inventive conduit from its deployed position within a collateral channel. The extension members may have openings to permit tissue ingrowth for improved retention within the lung. The opening may be used to anchor a tissue barrier that is located over a portion of the conduit . Alternatively, the extension members may be solid. [0089] Figures 2A-2C illustrate a variation of a conduit 200 as having a cage 212. The cage 212 will define a passage (not shown...
...in fluid communication with a passage of the center section (not shown). This pen-nits airflow through the conduit 200 in accordance with one of the benefits of the invention disclosed herein. In this variation, the cage 212 comprises a plurality of cage members 214. In use, the conduit 200 may be deployed with the distal 206 or cage side towards the parenchymal tissue or in the airway. [0090] Variations of the invention may include conduits 200 having expandable cages 212. Expansion of the cage 212 in the parenchymal tissue permits an increased surface area within the parenchyma to allow for improved air flow . [0091] The presence of the cage may prevent flaps or portions of the parenchymal tissue...glass-shaped, hemi-toroidal, or other.) [0093] Additionally, in some designs, one portion of the conduit may be radially expandable and another portion may not be radially expandable. For example, the center section may be designed as a hollow tubular member that is unexpandable. An expandable 12

cage may be joined to the center section. Accordingly, a **conduit** may have various sections some of which are expandable and others which are not expandable. [00941] The first diameter of the cage may be selected such that the **conduit** is small enough to fit within ...have passageways which have lengths greater than 1 mm. [00961] The cage of the inventive **lconduit** may have an axial length between 2 mm and 20 mm. The axial length will be measured along an axis of the passage of the **conduit**. [0097] Cage 212 may be formed from an ordinary wire mesh that functions to keep parenchymal tissue separated to increase **airflow** through the **conduit** 200 passage. However, in the variation depicted in Figure 2A, the cage 212 comprises a...214 (e.g., adjacent cage members). However, it is contemplated that variations of the inventive **conduit** may be designed without such control segments. One of the functions of the control segments...

11/3,AB,K/9 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00915914

**TURBULENT AIR CLEANING METHOD AND APPARATUS FOR CATHETER ASSEMBLIES
PROCEDE ET DISPOSITIF DE NETTOYAGE PAR AIR TOURBILLONNAIRE D'ENSEMBLES A
CATHETERS**

Patent Applicant/Assignee:

KIMBERLY-CLARK WORLDWIDE INC, 401 North Lake Street, Neenah, WI 54956, US
, US (Residence), US (Nationality)

Inventor(s):

MADSEN Edward B, 12707 South Roseberg Drive, Riverton, UT 84065, US,

CARLSSEN Wayne D, 4978 West Parr Drive, West Jordan, UT 84088, US,

CRUMP Chet M, 463 East Caroline Day Cove, Draper, UT 84020, US,

Legal Representative:

BONDURA Stephen E (et al) (agent), Dority & Manning, P.A., One Liberty Square, 55 Beattie Place, Suite 1600, Greenville, SC 29602, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200249680 A2-A3 20020627 (WO 0249680)

Application: WO 2001US48972 20011217 (PCT/WO US0148972)

Priority Application: US 2000741769 20001219

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP

KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RD TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6650

English Abstract

A method and apparatus are provided for cleaning a medical device tube, for example a catheter tube (34). The distal end portion (36) of the tube (34) has a distal opening (38) and at least one side opening (40) adjacent to the distal opening (38). The distal end of the tube is disposed in a closed chamber with the distal opening generally opposite from a first orifice defined in the chamber. A liquid is introduced into the chamber and is drawn into the distal opening in the tube, for example by a suction force. A different fluid medium, such as air, is drawn

Serial 110941

December 30, 2003

through the first orifice and into the distal opening in the tube. A turbulent flow path is established with the fluid medium wherein the medium is drawn through the first orifice, into the distal opening in the tube, out the side opening in the tube, and back into the distal opening in the tube. This turbulent flow path enhances the cleaning action of the liquid introduced into the chamber for cleaning the distal end portion of the tube within the chamber.

International Patent Class: A61B-019/00 ...

... A61B-019/02

Fulltext Availability: Detailed Description

Detailed Description

... lavage solution being directed radially inward towards the distal tip 42 and side or lateral **openings** 40 so that the solution may be completely removed from within the cleaning chamber 62. Once the entire process is complete, the cap ring 84 and **plug** member 78 may be used to seal or cover the distal **opening** of the adaptor 14 until the **catheter** assembly 10 is needed again....

11/3,AB,K/10 (Item 6 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00827086

URODYNAMIC CATHETER AND METHODS OF FABRICATION AND USE

CATHETER URODYNAMIQUE ET PROCEDES DE FABRICATION ET D'UTILISATION

Patent Applicant/Assignee:

CLINICAL INNOVATION ASSOCIATES INC, 6477 South Cottonwood Street, Murray,
UT 84107, US, US (Residence), US (Nationality)

Inventor(s):

WALLACE William Dean, 6477 South Cottonwood Street, Murray, UT 84107, US,
CUTLER Christopher A, 6477 South Cottonwood Street, Murray, UT 84107, US,
SMITH Steven R, 6477 South Cottonwood Street, Murray, UT 84107, US,
DIXON Richard A, 6477 South Cottonwood Street, Murray, UT 84107, US,

Legal Representative:

WALKOWSKI Joseph A (et al) (agent), TraskBritt, 230 South 500 East, Suite
300, P.O. Box 2550, Salt Lake City, UT 84110, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200160249 A1 20010823 (WO 0160249)

Application: WO 2001US4749 20010214 (PCT/WO US0104749)

Priority Application: US 2000504972 20000215

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ

TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI TM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8675

English Abstract

A urodynamic catheter (10) incorporating at least one balloon (22) adjacent a distal end (16) thereof and associated with a pressure lumen (20a, 20b) extending to a proximal end (18) to be placed external to the body of a patient and usable with a transducer housing (300) including a pressure transducer (308) and a mechanism for alternatively venting an

air column defined by the assembled pressure lumen (20a, 20b) and transducer housing (300) to the ambient environment and closing the air column and charging it with air while reducing volume of the air column. One embodiment (10) includes two, separately-chargeable balloons (22a, 22b) and a bladder fill tube, another embodiment (100) includes a single balloon (22) and a fill tube (14), and yet another embodiment (200), suitable for use as a reference catheter to measure abdominal pressure, includes only a single balloon (22) and omits the fill tube.

Main International Patent Class: A61B-005/03

Fulltext Availability: Detailed Description

Detailed Description

... longitudinal balloon ends, or cuffs, to the outer tubing 12 using a highly directional, hot-air stream. The balloons are baked at an elevated temperature, such as about 60°C for about forty minutes to stabilize their respective volumes. Subsequently, a male plug element or cap 38 is placed on the fill tubing connector 36, and the catheter is leak-tested, as known in the art.

Referring to FIGS. 5A through E and...

11/3,AB,K/12 (Item 8 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.
00379757

PULMONARY INTERFACE SYSTEM
INTERFACE PULMONAIRE

Patent Applicant/Assignee:

PULMONARY INTERFACE INC,
IMPCO TECHNOLOGIES INC,

Inventor(s):

TILLOTSON Paul J,
TAYLOR Thomas T,
TAJCHMAN Timothy R,
BINGEL Ronald D Sr,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9720500 A1 19970612

Application: WO 96US19054 19961127 (PCT/WO US9619054)

Priority Application: US 95567173 19951205

Designated States: AL AM AT AU BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI
GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ
UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC
NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 14487

English Abstract

A device (12) for sensing the respiratory air of a patient. The device includes a venturi tube (18) through which the patient inspires and expires, the tube having a constricted midportion (20). The tube also has an inspiration orifice (48), an expiration orifice (46), and a central orifice therebetween. An air mass flow sensor is positioned in the tube. A flow direction housing (24) is attached to the tube and has a channel (74) with an inspiration portion, an expiration portion, and a central portion therebetween. The housing also has an inspiration opening (68) providing communication between the tube inspiration orifice (88) and an end portion of the inspiration channel away from the central channel portion, an expiration opening (66) providing communication between the

Serial 110941

December 30, 2003

tube expiration orifice (88) and an end portion of the expiration channel portion, and a central opening (64) providing communication between the tube central orifice (44) and the central channel portion. This causes a flow of a portion of the respiratory air which the patient inspires to pass through the tube inspiration orifice and flow through the inspiration channel portion to the housing central opening, and a flow of a portion of the respiratory air which the patient expires to pass through the tube expiration channel portion to the housing central opening for return to the venturi tube at the tube constricted portion. A flow direction sensor is positioned in the inspiration channel portion and a flow direction sensor is positioned in the expiration channel portion to produce outputs responsive to the flow of respiratory air through the inspiration and expiration channel portions for determining if the respiratory air flowing through the venturi tube is inspired or expired air.

Main International Patent Class: A61B-005/087

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... venturi tube by a plug positioned in the conduit central opening. The plug has an air passage therethrough communicating with the central conduit portion and the tube constricted portion.

The device further includes a housing with an outward housing portion I 0...of the flow direction indicator housing 24. The sensor plug 50 has an axially extending air passage 60 extending between the inward end 50a and outward end 50b of the plug 50 to allow air to pass therethrough. The inward end of the air passage 60 communicates with the midportion 20 of the venturi tube 18.

The inward housing portion 32 of the flow direction indicator housing 24 has a...

...the exterior wall of the venturi tube 18 about the central orifice 44 such that air flow between the central aperture 64 outward of the sensor plug 50 and the venturi midportion 20 of the venturi tube passes only through the air passage 60 in the sensor plug.

The inward housing portion 32 also includes an expiration aperture 66 positioned toward an end...fills the compartment 58 seats the lead apertures 88 about the leads 86.

When the air flow within the venturi tube 18 is in the direction of arrow ...as occurs on inspiration, a reduced pressure is produced in the midportion 20 of venturi tube 18 at the inward end of the air passage 60 of the sensor plug 50. This reduced pressure creates an air flow in the channel 74, with the direction being from the expiration aperture 66 to the central aperture 64 and through the air passage 60 on expiration (arrow 16), and with the direction being from the inspiration aperture 68 to the central aperture 64 and through the air passage 60 on inspiration (arrow 14). When expiration (arrow 16) takes place a larger air flow occurs in a portion of the channel 74 in which the expiration thermistor 26 is positioned, and thus the air flow past the expiration thermistor 26 is greater than the air flow past the inspiration thermistor 28, and when inspiration (arrow 14) takes place a larger air flow occurs in a portion of the channel 74 in which the inspiration thermistor 28 is positioned, and thus the air flow past the inspiration

I 0

thermistor 28 is greater than the air flow past the expiration

thermistor 26. The expiration and inspiration thermistors 26 and 28 are self...

...by the thermistors, it is possible to determine with high speed and accuracy whether the ~~air~~ flow rate is larger past the expiration thermistor 26 or the inspiration theristor 28, and hence the direction of the air flow within the venturi tube 18. This identifies whether the air flow is expired air or inspired air.

Because the expiration and inspiration thermistors 26 and 28...the inspiration channel portion 116 from each other, and the sensor plug 50 has two air passages, an expiration air passage 60a which communicates the expiration channel portion 1 14 with the midportion 20 of the venturi tube 18, and an inspiration air passage 60b which communicates the inspiration channel portion 1 16 with the midportion 20 of the venturi tube . Except for the separation of the flows, the respiratory air sensing device 12 of Figure...

...present invention is shown in

Figure 14 which utilizes a sensor plug 50 without the air passage 60. Instead. the I 0 central portion of the channel 74 communicates with the exterior of the flow direction indicator housing 24, at a location outside of the venturi tube 18, through a conduit 120 formed in a sidewall portion of the outward housing portion 30. In the embodiment of Figure 14, the conduit 120 is shown connected by a tube 122 to a sample container 124, via a one-way fitting 126 to allow a...

...sample of 5 the breath of a patient. The constricted midportion 20 of the venturi tube 18 will cause pressure within the venturi tube to build when a patient expires air into the first end opening 38 of the venturi tube , or inspires air into the second end opening 40 of the venturi tube . This will cause a flow of air through the channel 74, much as described above except the air path is to the outside of the venturi tube instead of into the midportion 20 thereof. To insure sufficient pressure is built up inside the venturi tube 18 during expiration to force air through the channel 74 and out of die conduit 120, especially when the sample container 124 is used to take an air sample of...

...end cap 128 can be momentarily positioned to at least partially close the second end opening 40 of the venturi tube . Alternatively, the hand of the patient may be used to partially close the second end opening 40.

Accordingly, the present invention allows rapid and accurate measurements of the volume of a...

Claim

... being positioned ~~in~~ said tube central orifice and said housing central opening, and has an air passage therethrough communicating with said central channel portion and said tube midportion.

10 The respiratory air sensing device according to claim 9 wherein said Plug is...venturi tube by a plug positioned in said housing central opening, said plug having an air passage therethrough communicating with said central channel portion and said tube constricted portion.

23 The respiratory air sensing device according to claim 15 wherein said housing...

...venturi tube by a plug positioned in said housing central opening, said plug having an air passage therethrough communicating with said central channel portion and said tube constricted portion, said plug being sealingly mounted in said housing central opening of said inward housing portion and sealingly engages said venturi tube about said tube central orifice to provide a seal between said venturi tube and

Serial 110941

December 30, 2003

said inward housing portion.

25 The respiratory air sensing device according to claim 23...venturi tube by a plug positioned in said conduit central opening, said plug having an **air passage** therethrough communicating with said central conduit portion and said **tube** constricted portion.

37 The respiratory air sensing device according to claim 29, further including a...venturi tube by a plug positioned in said conduit central opening, said plug having an **air passage** therethrough communicating with said central channel portion and said **tube** constricted portion, said **plug** being sealingly mounted in said **conduit** central **opening** of said inward housing portion and sealingly engaging said venturi **tube** about said **tube** central orifice to provide a seal between said venturi **tube** and said inward housing portion.

39 The respiratory air sensing device according to claim 29...

11/3,AB,K/13 (Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00352051

MULTIPLE CUFF BLOOD PRESSURE SYSTEM

TENSIOMETRE A PLUSIEURS BRASSARDS

Patent Applicant/Assignee

MARKS Lloyd A,

Inventor(s):

MARKS Lloyd A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9634564 A1 19961107

Application: WO 96US2437 19960304 (PCT/WO US9602437)

Priority Application: US 95435158 19950505

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 3583

English Abstract

A multiple blood pressure cuff system comprises a plurality of inflatable cuffs (12a-12e) of a range of widths and lengths which collectively share a common pressure source (14) and a common pressure measuring device (16). A manifold (18) pneumatically connects each cuff (12a-12e) to the common pressure source (14), pressure measuring device (16), and stopcock valves (20a-20e) allow airflow to be directed to the particular cuff in use. A mounting board (24) is provided for affixing the system to a wall or cabinet and for conveniently supporting and displaying the cuffs (12a-12e) that are not in use.

Main International Patent Class: A61B-005/00

Fulltext Availability: Detailed Description

Detailed Description

... five-position stopcock-type valve comprising a valve body 40 with a cylindrical gate or **plug** 42 that is adapted to be rotated about its central axis by means of a...

...air inlet pipe 48 is connected centrally to valve body 40 so as to admit air flow as depicted by arrow D into the chamber 50 of cylindrical gate or **plug** 42 from an inflation means, such as a pressure pump or inflation bulb 14. A manometer or pressure gauge 52 is connected to the

Serial 110941
December 30, 2003

chamber 50 of gate or ~~plug~~ 42 by means of a ~~pipe~~ 54 so as to measure the air pressure in ~~chamber~~ 50.
Flexible tubes 26a-26e...

11/3,AB,K/14 (Item 10 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.
00213755

BRONCHOALVEOLAR LAVAGE CATHETER
CATHETER DE LAVAGE BRONCHO-ALVEOLAIRE

Patent Applicant/Assignee:
BALLARD MEDICAL PRODUCTS,

Inventor(s):

STRICKLAND Richard D,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9210971 A1 19920709

Application: WO 91US9732 19911220 (PCT/WO US9109732)

Priority Application: US 90638 19901221; US 91379 19911219

Designated States: AT AU BE CA CH DE DK ES FR GB GR IT JP LU MC NL SE

Publication Language: English

Fulltext Word Count: 12630

English Abstract

An outer catheter (72) so sized and configured so as to extend from a point below the first bifurcation of the trachea through the upper respiratory system of the patient is disposed about an inner catheter (62) having a tip (75) secured in the opening at the distal end (74) thereof with an outer lateral periphery larger indiameter than the outer surface of the inner catheter. A passageway (76) is formed between said outer catheter (72) and said inner catheter (62). A connector hub assembly (77), connected to the proximal end (73) of the outer catheter (72) and couplable to a supply of oxygen, allows for oxygen insufflation to take place during the bronchoalveolar lavage procedure. The proximal surface of the tip (75) between the outer lateral periphery and the outer surface of the inner catheter (62) is capable of sealingly engaging the distal end (74) of the outer catheter (72). In this condition the pair of catheters can be advanced through the upper respiratory system of the patient without contaminating the outer surface of the inner catheter (62). Thereafter the inner catheter (62) is advanced relative to the outer catheter (72) into a wedging position in a bronchiole of the patient. In one embodiment, the inner catheter is provided with a selectively inflatable cuff by which to engage the walls of a bronchiole of the patient.

Main International Patent Class: A61B-005/00

Fulltext Availability: Detailed Description

Detailed Description

... quantity of fluid 120 from reservoir 46 (Figure 1) is used to flush any ~~plug~~ of contaminatdd mucous from aperture 108 in tip 75. Fluid 120 passes harmlessly into the...

...as bronchiole 122a in Figure 7D . Wedging may be verified through the appropriate use of air ~~passageway~~ pressure monitor 50. Longitudinal movement of sampling ~~catheter~~ 62 thereafter is ADVISEDLY restrained by suitable means, such as those locatable in bronchoalveolar lavage ~~catheter~~ access port 44 (Figure 1).

Thereafter,, fluid from reservoir 46 is infused into the position...

18/3,AB,K/1 (Item 1 from file: 349)

Serial 110941
December 30, 2003

DIALOG(R) File 349:PCT FULLTEXT
(c) 2003 WIPO/Univention. All rights. reserv.
00195422

SOFT TISSUE ASPIRATION DEVICE AND METHOD
DISPOSITIF ET PROCEDE D'ASPIRATION DE TISSUS MOUS

Patent Applicant/Assignee:
HERAEUS LASERSONICS INC,

Inventor(s):

DRESSEL Thomas D,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9112774 A1 19910905

Application: WO 91US275 19910114 (PCT/WO US9100275)

Priority Application: US 9081 19900226; US 90679 19901009

Designated States: AT BE CH DE DK ES FR GB GR IT JP LU NL SE

Publication Language: English

Fulltext Word Count: 8021

English Abstract

A laser soft tissue aspiration device (10) comprises an aspiration cannula (12) housing a laser energy transmitting means (32) for conducting laser energy to the site within a patient's body for aspiration of soft tissue. The cannula is provided with an aspiration inlet port (20) adjacent the cannula distal end (18). The proximal end of the cannula is provided with fluid flow connection (28) to an aspiration source. A laser guide tube is additionally provided housing the laser energy transmitting means (32) extending longitudinally within the cannula lumen from a laser energy source at the cannula proximal end and terminating at a point immediately prior to the aspiration inlet port (20). The tube also provides a conduit for transmitting cooling and cleaning fluid flow for the laser energy transmitting means. A surgical method of aspirating soft tissue from a patient in vivo using this device is also provided transmitting means. Separated soft tissue and fluid is aspirated through the aspiration inlet port and the cannula by means of an aspiration source at the proximal end of the cannula.

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... patient in vivo, This invention has immediate and direct application to the surgical procedure of **liposuction** or body contouring as well as application in the **surgical** procedures of other soft tissue...

...possibility of unwanted damage to deeper tissues in the path of the laser energy beam.

Liposuction, a surgical technique of removing unwanted fat deposits for the purpose of body contouring, has achieved widespread use, In the United States, over 100,000 **liposuction** procedures were performed in 1989 alone. This technique utilizes a hollow tube or cannula with...with minimal tissue trauma and blood loss.

This invention utilizes a modification of a suction **lipectomy** cannula, already in clinical use, to position soft tissue within a protective chamber, allowing a...

...more efficient) and minimizes tissue-trauma by eliminating the ripping action inherent in the conventional **liposuction** method.

This invention, by eliminating the ripping action of the conventional **liposuction** method, expands the scope of soft tissue removal. Currently, the **liposuction** method is limited to the aspiration of fat, Other soft tissues, such as breast tissue...

...hemangiomas are too dense or too vascular to allow efficient and safe removal utilizing the ~~liposuction~~ method. This invention with the precise cutting and coagulating action of the Neodymium@YAG laser...cut-away detail of the first laser soft tissue device illustrated in position for performing **liposuction** within a fatty deposit of a body intermediate overlying epidermal layer and underlying muscle layer...accommodate the external diameters of the large 32 and small guide tubes 36. The guide **tube** components are joined together and to the proximal handle end cap 26 and within the aspiration **cannula** inner wall utilizing a means such as soldering or welding. The fluid and laser guide **tube** is provided with an O-ring seal 46 at its retention within the proximal handle...

...at the laser energy source port 41, Housed within the fluid and laser fiber guide **tube** is the laser fiber optic delivery system 62, shown in Figures 1, 21 31 41 5 and 6, and consists of the Teflon coaxial fluid delivery **tube** 44, the Teflon laser fiber sheath 50, and the laser fiber 54, having laser discharge axis 58, The Teflon coaxial fluid delivery **tube** 44 is connected to a saline fluid source and pump integral with the laser energy...

...the handle 16, through the fluid and laser guide channel 30 into the large guide **tube** 32, terminating at a point 48 within the large guide - 10 **tube**, The large guide **tube** 32 is maintained in position within **cannula** 12, for example, by silver solder through ~~holes~~ 37, as illustrated in Figures 2 and 3, The Teflon coaxial fluid delivery **tube** delivers cooling and irrigating fluid into the fluid and laser large guide **tube** 32, the fluid passes distally within the guide **tube** 32 surrounding the Teflon laser fiber sheath 50 and laser fiber 54 to the terminal point of the small guide **tube** 36, The laser fiber 54 constitutes the laser energy transmitting means, extending from the laser...

...point 56 immediately prior to the terminal point of the fluid and laser fiber guide **tube** 40, The retention of the laser fiber optic system 62 is accomplished by a retaining...

...modifications of the preferred configuration of the present invention which allow the soft tissue aspiration **cannula** to accommodate an alternative fiber optic delivery system 64 (Figure 9) which does not incorporate a Teflon coaxial fluid delivery **tube**, A bushing 68 is positioned within the fluid and laser guide channel 30 to allow a fluid and air-tight seal at the fluid and energy source port 41, An optional fluid delivery port...

...fluid source and pump, ~~not~~ shown), This port 66 is fitted with a fluid and air tight **plug** 60 when the Teflon coaxial fluid delivery **tube** is used. As will be apparent to those skilled in this art, a shorter and...

Claim

... said laser energy transmitting means to the laser guide tube termination point.

18 A laser **liposuction** device according to claim 17, wherein the laser energy source is a neodymium-YAG laser.

19 A laser **liposuction** device according to claim 17, wherein the aspiration cannula is formed of stainless steel and is formed with a generally rounded or bullet-shaped distal end.

20e A laser **liposuction** device according to claim 17, wherein the length of the cannula is between about 11...

...diameter is between about 0,156 inches to about 0.312 inches.

21 A laser **liposuction** device according to claim 17, wherein the proximal end of the laser guide tube is provided with an O-ring seal.

22 A laser **liposuction** device according to claim 17, wherein the laser energy transmitting means is a fiber optic...